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NAVAL POSTGRADUATE SCHOOL
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THESIS

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FEMALE ENLISTMENT IN THE UNITED STATES ARMY RESERVE: MEMBERSHIP AND MOTIVATIONS

by

Spencer J. Murray

December 1987

Thesis Advisor George W. Thomas

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Female Enlistment in the United States Army Reserve: Membership and Motivations

by

Spencer J. Murray
Captain, United States Army
B.S., Tennessee Technological University, 1977

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

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TABLE OF CONTENTS

LIST OF TABLES 7
LIST OF FIGURES 9
I. INTRODUCTION 10
    A. BACKGROUND 10
    B. NATURE OF THE PROBLEM 11
II. METHODOLOGY 26
    A. DATA BASES 26
    B. DATA SAMPLES 28
    C. DATA ANALYSIS 30
    D. STRENGTHS AND LIMITATIONS 33

III. SOCIOECONOMIC PROFILES 34
    A. COMPOSITION OF TOTAL MEMBERSHIP 34
    B. MALE-FEMALE MEMBERSHIP COMPARISONS 36
    C. VETERAN STATUS SUBPOPULATION DIFFERENCES 40

IV. ANALYSIS OF THE USAR MARKET SAMPLE 43
    A. NON-PRIOR SERVICE MEMBERSHIP 43
    B. PRIOR SERVICE MEMBERSHIP 45
    C. CENSUS REGION PARTICIPATION 48
    D. ENTRY AGE AND OCCUPATIONAL CHOICES 52
V. ENLISTMENT MOTIVATIONS 56
    A. BACKGROUND 56
    B. ACCESSION SAMPLE 59
    C. COMPOSITION OF FY86 USAR ACCESSIONS 60
    D. ECONOMIC INFLUENCES 63
    E. ADVERTISING INFLUENCES 66
    F. INTRINSIC INFLUENCES 70
    G. ARMY RECRUITERS AND COUNSELORS 73
    H. INFLUENCES UNIQUE TO THE USAR 74

VI. SUMMARY 77
    A. RESULTS OF ANALYSIS: USAR MEMBERSHIP 77
    B. RESULTS OF ANALYSIS: ENLISTMENT MOTIVATIONS 79
    C. CONCLUSIONS 81

APPENDIX A: DATA BASES FOR ECONOMETRIC VARIABLES 85

APPENDIX B: VALUE LABELS 87

APPENDIX C: TOTAL USAR ENLISTED MEMBERSHIP 90

APPENDIX D: USAR NON-PRIOR SERVICE ENLISTED MEMBERSHIP 100

APPENDIX E: USAR PRIOR SERVICE ENLISTED MEMBERSHIP 110

APPENDIX F: ECONOMIC INFLUENCES ON 1986 NEW RECRUIT SURVEY 120

APPENDIX G: ADVERTISING INFLUENCES ON 1986 NEW RECRUIT SURVEY 124

APPENDIX H: INTRINSIC INFLUENCES ON 1986 NEW RECRUIT SURVEY 128

APPENDIX I: INFORMATION FROM ARMY RECRUITERS AND GUIDANCE COUNSELORS 132

LIST OF REFERENCES 134
BIBLIOGRAPHY 136
INITIAL DISTRIBUTION LIST 140

LIST OF TABLES

1. ARMY RESERVE COMPONENT CONTRIBUTION TO THE TOTAL ARMY - 1986 13
2. ARMY AFQT CATEGORY DISTRIBUTION BY ENTRY AGE AND SEX FOR FY73 AND FY83 21
3. ARMY EDUCATION LEVEL DISTRIBUTION BY ENTRY AGE AND SEX FOR FY73 and FY83 22
4. CONTENT AREAS OF THE RESERVE COMPONENT COMMON PERSONNEL DATA SYSTEM 26
5. DEMOGRAPHIC COMPOSITION OF THE USAR ENLISTED MEMBERSHIP SAMPLE FOR MARCH 1987 35
6. DEMOGRAPHIC COMPOSITION OF THE USAR ENLISTED MEMBERSHIP SAMPLE BY SEX FOR MARCH 1987 37
7. DEMOGRAPHIC COMPOSITION OF THE USAR ENLISTED MEMBERSHIP SAMPLE BY VETERAN STATUS AND SEX 41
8. USAR NON-PRIOR SERVICE ENLISTED MEMBERSHIP BY ENTRY AGE AND SEX 43
9. USAR NON-PRIOR SERVICE ENLISTED MEMBERSHIP BY RACIAL-ETHNIC GROUP AND SEX 44
10. USAR PRIOR SERVICE ENLISTED MEMBERSHIP BY ENTRY AGE AND SEX 45
11. USAR PRIOR SERVICE ENLISTED MEMBERSHIP BY RACIAL-ETHNIC GROUP AND SEX 46
12. CENSUS REGIONS BY ENTRY AGE AND SEX FOR USAR NON-PRIOR SERVICE MEMBERSHIP 49
13. CENSUS REGIONS BY RACIAL-ETHNIC GROUP AND SEX FOR USAR NON-PRIOR SERVICE ENLISTED MEMBERSHIP 50
14. CENSUS REGIONS BY ENTRY AGE AND SEX FOR USAR PRIOR SERVICE ENLISTED MEMBERSHIP 51
15. CENSUS REGIONS BY RACIAL-ETHNIC GROUP AND SEX FOR USAR PRIOR SERVICE ENLISTED MEMBERSHIP 53

16. OCCUPATIONAL SPECIALTIES BY ENTRY AGE AND SEX FOR USAR NON-PRIOR SERVICE ENLISTED MEMBERS 54

17. DEMOGRAPHIC COMPOSITION OF 1986 RNRS RESPONDENTS BY SEX 60

18. ECONOMIC INFLUENCES ON 1986 RNRS RESPONDENTS BY SEX 64

19. ECONOMIC INFLUENCES ON 1986 RNRS RESPONDENTS BY RACIAL-ETHNIC GROUP AND SEX 65

20. ADVERTISING INFLUENCES ON 1986 RNRS RESPONDENTS BY SEX 67

21. ADVERTISING INFLUENCES ON 1986 RNRS RESPONDENTS BY RACIAL-ETHNIC GROUP AND SEX 68

22. ADVERTISING INFLUENCES ON 1986 RNRS RESPONDENTS BY QUALITY GROUPS 68

23. INTRINSIC INFLUENCES ON 1986 RNRS RESPONDENTS BY SEX 70

24. INTRINSIC INFLUENCES ON 1986 RNRS RESPONDENTS BY RACIAL-ETHNIC GROUP AND SEX 71

25. RESERVE FACTORS INFLUENCING 1986 RNRS RESPONDENTS BY SEX 74

26. RESERVE FACTORS INFLUENCING 1986 RNRS RESPONDENTS BY AGE, RACE, AND QUALITY 75

LIST OF FIGURES

1. Reserve Component Growth Requirements 12
2. Estimate of U.S. Male Population Age 17-21, Including Armed Forces Overseas 16
3. FY84 TPU Enlisted Accessions 17
4. Present vs. Future Total Army Quality Requirements 19
5. Relative Size By Army Functions FY83 and FY90 19
6. Demographic Random Sample for March 1987 USAR Membership 28
7. Market Segment Sample for March 1987 USAR Membership 29
8. The Career Motivation Process: Key Decision Points and Influential Factors 58

I. INTRODUCTION

A. BACKGROUND

The transition from conscription to the All-Voluteer Force (AVF) which went into effect 1 July 1973, marked a new era in the military history of the United States. Military leaders were confronted by an avalanche of personnel problems not previously encountered. Economic and environmental factors that were of low priority under conscription suddenly posed questions of the utmost importance to national security. As the single largest employer of the nation's youth, the armed forces needed effective recruiting strategies to compete with civilian businesses in a highly competitive labor market.

Furthermore, inception of the AVF rekindled philosophies of the citizen-soldier. Demographic and socioeconomic factors critical to attracting a force representative of the populace could not be disregarded. Politically, the new force of volunteers could either be applauded as a vehicle for affirmative action or be criticized as another mechanism for oppressing the poor and socioeconomically disadvantaged. Eitelberg and Binkin (1982) stipulated there are "three areas of national policy --- political legitimacy, military effectiveness, and social equity --- that presently frame a core of concern over military manpower recruiting under the AVF" [Ref. 1 p. 244].

In response to these pressures, a vast amount of research has been dedicated to studying problems of enlistment, retention, and attrition within the military's active components. Unfortunately, neither the Department of Defense nor many military researchers recognized a need to extend their efforts to the reserve components. It was believed that whatever changes transpired in the active components would be mirrored by the reserve components [Ref. 2 p. 169]. Major changes in defense policies occurring during the transformation period of the AVF helped to alter these end results for the Army and its reserve components.

A major policy change to dramatically affect the Army occurred upon implementation of the Total Force concept. The U.S. Army Reserve (USAR) assumed an unprecedented role in the Army's mission. The status of the USAR is said to have been elevated from "an adopted child" to that of a "joint heir." The Army's ability to perform its mobilization mission now hinges upon the level of readiness maintained by the U.S. Army Reserve and National Guard. [Ref. 3 p. v].

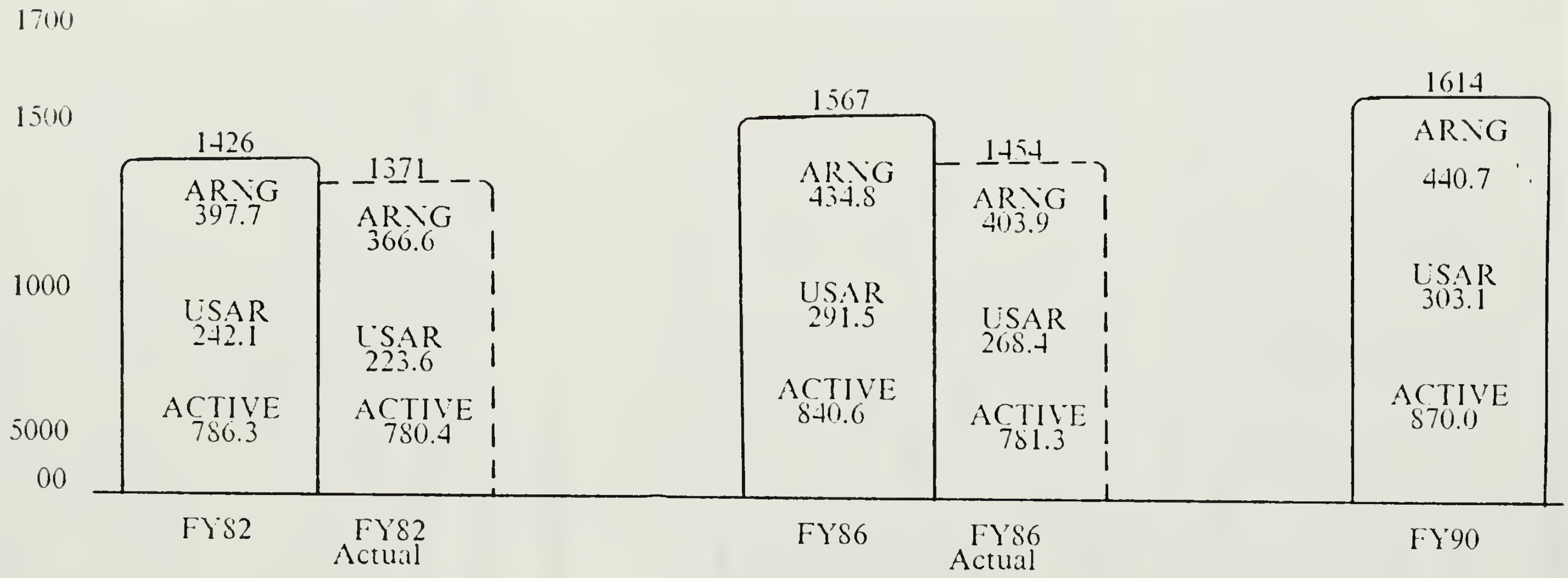
A second policy change affecting all components resulted from an increased utilization of women in the military. The Department of Defense sanctioned greater female participation for the expressed purpose of counteracting shortages in the number of male volunteers [Ref. 15 p. 249]. Legislation on the Equal Rights Amendment and the Supreme Court decision in Fronterio v. Richardson were additional incentives for the military to change many of its personnel policies with regard to women. At last, women were entitled to the same dependency benefits afforded their male counterparts. Between 1972 and 1976, female participation more than doubled in the active components. A similar pattern of growth was experienced in the reserve components. [Ref. 4 pp. 83-99]

At the end of 1976, women comprised 10 percent of the Army Reserve and 6.3 percent of the Regular Army. Despite efforts to curtail the growth rate of women in September 1976, female participation in the reserve component continued to climb at a relatively high rate. By the beginning of 1983, women made up 16 percent of the Army Reserve compared to 9.7 percent of the Regular Army [Ref. 4 p. 99]. Although the USAR depended more on women to meet its manpower requirements, existing literature on the personal and socioeconomic backgrounds of enlisted females pertains almost exclusively to active-duty personnel. Demographic variations and organizational differences between the two components dictate a need for the USAR to identify factors unique to the recruitment and retention of its own component members.

B. NATURE OF THE PROBLEM

Manpower requirements in Figure 1 and contributions by component in Table 1 are indicative of the USAR's increased responsibilities. Based upon the prescribed division mix and projected growth rate of the Total Force, an overall increase of 13.2 percent is required for enlisted personnel between 1982 and 1990. The projected growth rate over the eight years for the USAR is more than twice as large as the rate for the active Army (25.2 percent versus 10.6 percent) and requires a greater recruiting effort. Contributions for major elements shown in Table 1 indicate that some combat support (CS) and combat service support (CSS) elements will receive 60 to 100 percent of their personnel from troop program units in the Army Reserve. [Ref. 3,5 pp. 4-5,28]

Continuance of the AVF depends upon the ability of the Total Force to recruit the number of personnel mandated by Congress for all components. Satisfying congressional mandates with regard to both quality and quantity has already proven to



PROJECTED GROWTH RATES

Note: Average growth, total = 13.2%
Army National Guard = 10.8%
U.S. Army Reserve = 25.2%
Active Duty = 10.6%

Source: Projected strengths - Derived from Reference 5, page 28
Actual strengths - Defense Manpower Data Center

Figure 1. Reserve Component Growth Requirements (in 1,000's)

TABLE 1

ARMY RESERVE COMPONENT CONTRIBUTION TO THE TOTAL ARMY - 1986

MAJOR ELEMENTS	ARNG QUANTITY	ARNG % OF TOTAL	USAR QUANTITY	USAR % OF TOTAL	TOTAL PERCENT
Combat Divisions	9	35	0	0	35
Separate Brigades[1]	19	66	10	76	76
Special Forces Groups	2	25	2	25	50
Special Forces Bns	6	25	6	25	50
Infantry Battalions	71	74	7	7	81
TLAT[2] Infantry Bns	4	100	0	0	100
Mech Inf Bns	41	47	2	2	49
Inf Scout Troops	5	100	0	0	100
Armored Battalions	43	43	2	2	45
Armored Cavalry Bns	4	57	0	0	57
Field Artillery Bns	105	47	18	8	55
Heavy Helicopter Cos	6	100	0	0	100
Medium Heicopter Cos	2	11	2	11	22
Pathfinder Units	5	46	5	46	92
Combat Engr Bns/Units	197	43	113	25	68
Coventional Ammo Cos	14	17	37	44	61

(continued on next page)

TABLE 1

ARMY RESERVE COMPONENT CONTRIBUTION TO THE TOTAL ARMY - 1986 (CONT'D.)

	ARNG		USAR		
MAJOR ELEMENTS	QUANTITY	% OF TOTAL	QUANTITY	% OF TOTAL	TOTAL PERCENT
Truck Companies (all)	59	37	48	44	61
Maintenance Cos (all)	94	46	57	28	74
Army Hospitals	16	11	91	63	74
Medical Units (other)	135	24	220	40	64
S&S Capability	16	31	21	40	71
Civil Affairs Units	0	0	36	97	97
Training Divisions	0	0	12	100	100
Training Brigades	0	0	3	100	100
Psycho Opns Units	0	0	33	87	87
JAG Units	3	2	117	98	100
Corps Spt Groups HHC	4	17	15	62	79
Major Log Units (TAACOM and COSCOM HHC/MMC Commands)	10	22	12	26	48
Engr Brigade Co (non-Div)	15	48	6	19	67
QM POL Operating Co	0	0	5	45	45

(concluded on next page)

TABLE 1

ARMY RESERVE COMPONENT CONTRIBUTION TO THE TOTAL ARMY - 1986 (CONT'D.)

	ARNG		USAR		
MAJOR ELEMENTS	QUANTITY	% OF TOTAL	QUANTITY	% OF TOTAL	TOTAL PERCENT
Chemical Units-Smoke Gen	0	0	5	45	45
Corps Signal Bns	14	47	3	10	57
Public Affairs Units	53	65	25	30	95
MP Cos (non-Div)	91	46	40	20	66
Railroad Units	0	0	7	100	100
Watercraft Companies	1	7	7	50	57

---

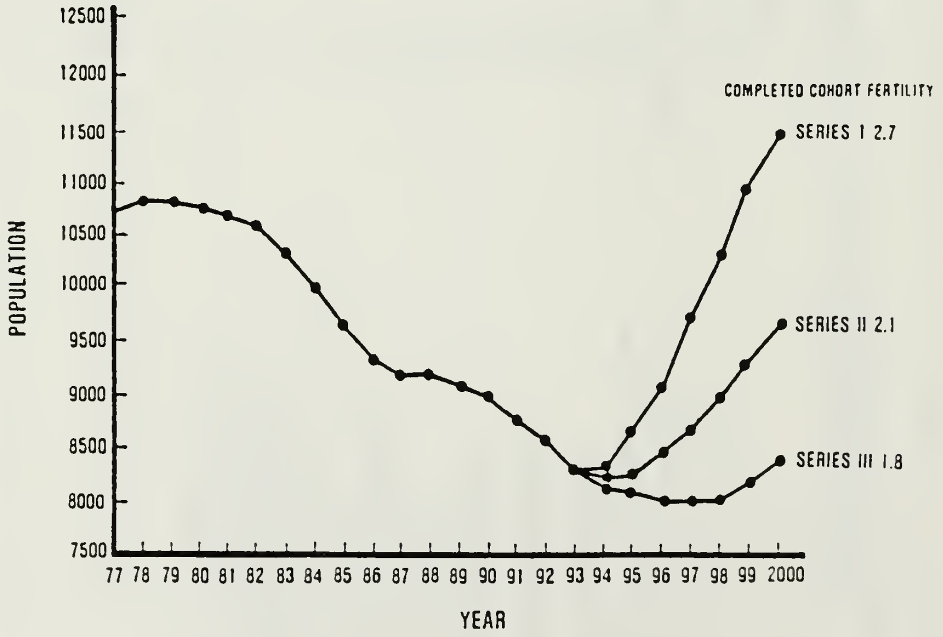
[1] Does not include 6th CBAC

[2] TLAT - Tow Light Anti-Tank

Source: U.S. Army Research Institute [See Ref. 3 pp. 4-5] be a major challenge for the active component. The challenge is even greater for the the Army Reserve in light of its projected growth and the absence of research tailored to its specific needs.

Currently, the USAR has the statutory authority to recruit male and female personnel up to the age 34. A large percentage of its non-prior service force are recruited from the primary military market of 17- to 21-year-olds. Recruitment of this market segment poses problems with filling reserve quotas. This population also has a relatively high attrition rate. During 1983 and 1984, the USAR's ability to exceed recruiting objectives for prior service personnel helped to offset some adverse effects created by personnel losses in the younger age group. [Ref. 6,3 pp. 66,11]

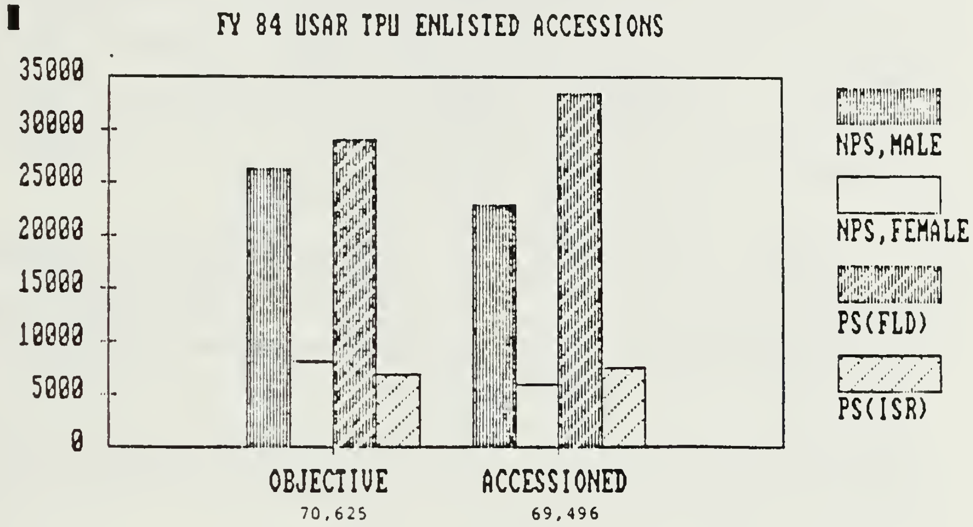
The Army Reserve is competing with active components and the National Guard for its market share of a declining demographic population. Borack and Govindan (1978) projected a 20- to 25-percent decline in this source of military manpower during the 1980s and 1990s. Statistics from the U.S. Bureau of Census support their prediction indicating a 26-percent decline in the 17- to 21-year-old male population of the United States between 1978 and 1993. Projected declines in the male youth population are given in Figure 2.



Source U.S. Bureau of the Census [*Ref. 16 p. 2*]

Figure 2. Estimate (in thousands) of U.S. male population age 17-21, including Armed Forces overseas.

During fiscal year (FY) 1984, the USAR failed to meet its recruiting goals for non-prior service males and females. Many attribute the shortfall to improved economic conditions, since there were indications that the Army was also experiencing a shortfall in recruits [Ref. 5 p. 11]. However, effects from the age shift in the U.S. population cannot be totally disregarded in the case of males. Since females represent a market segment that has not been extensively tapped by the active components, shortfalls may in part be attributable to current advertising and recruiting practices.



Source: *U.S. Army Forces Command* [*See Ref. 3 p. 11*]

Figure 3

Traditionally, military recruiting and advertising programs have focused upon male youths. Females and older market segments have never been major recruiting targets or extensively researched as alternate pools of reserve manpower [Ref. 8 p. 11]. With the emphasis on high-quality (Armed Force Qualification Test category I-IIIA) accessions, high school seniors and recent graduates have taken center stage in most recruiting efforts. Scores equivalent to each AFQT category are given in Appendix B in terms of the Weschler Adult Intelligence Scale, the Army Standard Score, and the AFQT percentile rank. The inability of recruiters to enlist a sufficient number of AFQT category I-IIIA males has provided limited opportunities for females. Still, there may be women and older individuals with a positive propensity to enlist that are not aware of the opportunities available to them.

Borack (1978) found that women in the 18-25 year group expressed an enlistment propensity for the active military similar to that of men. Major differences, however, were noted between men and women with a positive propensity in terms of their choice in occupational skills and interests. In a later study, Borack (1982) also showed that males 23 to 29 years of age could provide a sizeable supply of military manpower. Though these studies provide valuable information in identifying potential sources of manpower, they focus on the active duty components, and the older market segment of women is excluded.

In examining alternative sources for the USAR, demographic and organizational limitations must be considered in the analysis. Reservists stay at home and are employed by the military on a part-time basis. Individuals with a positive enlistment propensity are limited in their choices of unit type and occupational skill by military requirements of the TPU's in a specified geographical area.

Rostker and Shishko (1973) developed a theory on secondary labor market participation that may reflect the true nature of reserve service. Grissmer and Kirby (1984) expanded upon the moonlighting theory in an attempt to explain the attrition and retention behavior of personnel in the Army Reserve and National Guard. The characteristics they identified as setting reserve duty apart from civilian moonlighting are stated below and may be used as a theoretical framework for analyzing alternate sources of reserve manpower [Ref. 2 p. 171].

- Reserve service is more likely to conflict with primary job requirements than is civilian moonlighting.

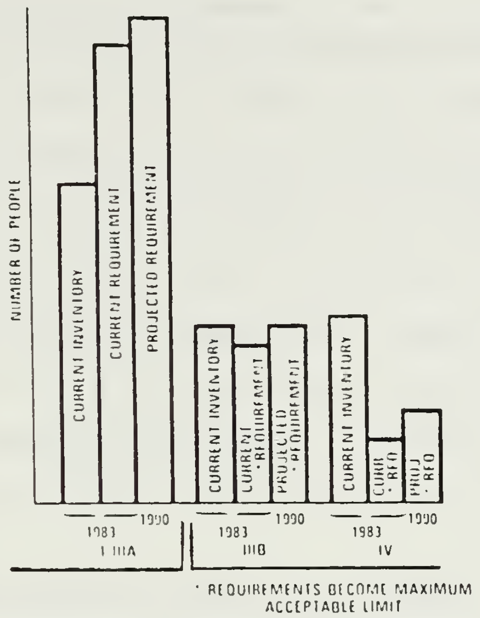
- Reserve service requires a legal commitment not otherwise incurred in the civilian sector.

- Fringe benefits provided by reserve components typically cannot be obtained through participation in other secondary labor markets.

- Reserve service provides some nonpecuniary rewards similar to fraternal and service organizations.

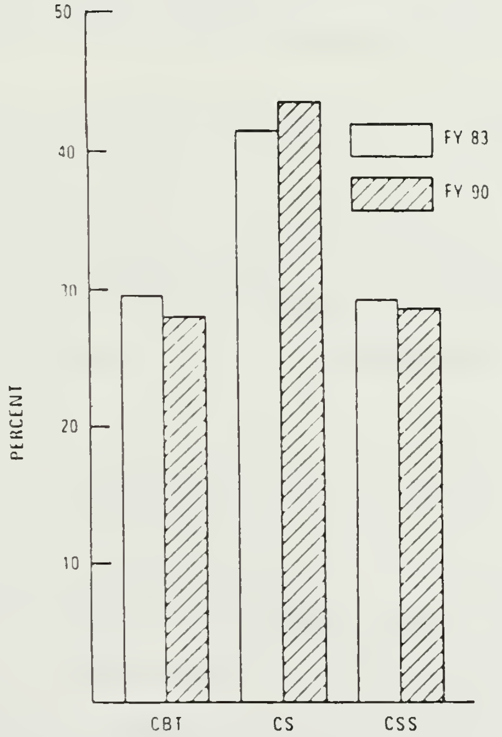
- The work schedules of reservists in terms of the number of hours worked are generally inflexible compared to their civilian counterparts.

The concern for high-quality enlistments in the Army is of equal dimension with the Army's concern for the decline in male youths. The design and equipment density of new systems dictate the need for a larger proportion of the force to be high school graduates in AFQT categories I-IIIA. Figure 4 gives current and projected manpower requirements for the Army by AFQT category. [Ref. 7 pp. 122-135]



Source: *Training and Doctrine Command* [*See Ref. 7 p. 127*]

Figure 4. Present vs. Future Total Army Quality Requirements FY83 and FY90



Source: *Training and Doctrine Command* [*See Ref. 7 p. 123*]

Figure 5. Relative Size by Army Functions FY83 and FY90

Traditionally, it is only a matter of time before the Army Reserve units receive the same weapon systems and equipment as used in the active component. Therefore, the concern for high-quality reservists is also growing. Figure 5 shows that the only functional area to increase in terms of the number of personnel is combat support. By 1990, the Signal Corps which is a combat support (CS) element will replace the Infantry as the largest military occupational specialty [Ref. 7, p. 123]. Major elements supplemented by the USAR in Table 1 are dominated by the combat support and combat service support (CSS) specialties. Figure 5 also indicates there will be a small decrease in the number of personnel required in the combat service support functional area. Quality requirements placed on the total Army, however, dictate the need to recruit a higher proportion of AFQT category I-IIIA personnel in both of these functional areas.

The combat support and combat service support areas are emphasized since they are most critical to the USAR's mission and require an increase in the number of I-IIIA personnel recruited. Quality requirements for the combat (CB) functional area will be higher, but the reduction in the total strength eliminates the need for quantitative increases of personnel in the upper AFQT categories. Overall, 85 percent of the force must be high school graduates, 65 percent must be in AFQT categories I-IIIA, and no more than 20 percent should be in mental category IV [Ref. 12 p. 281].

A vast majority of the combat support and all of the combat service support specialties are open to women. In the Army the percentage of enlisted women in mental categories I-IIIA is substantially higher than it is for men [Ref. 8 p. 70]. Table 2 represents the distribution of mental categories for the Army by entry age and sex. Dramatic decreases in the percentage of AFQT category I-IIIA females between ages 17 and 24 are attributable primarily to the elimination of higher entry standards for women.

Enlisted women also tend to have higher educational attainment than do enlisted men [Ref. 8 p. 46]. Table 3 shows the educational attainment for enlisted personnel by entry age and sex. Overall, trends in the AFQT category and educational attainment for women are large enough after the elimination of dual entry standards to still be significant. These characteristics of enlisted females on active-duty suggest they are a highly desirable source of manpower. Effective recruiting of this alternate market segment could assist the Army Reserve in meeting its manpower requirements qualitatively as well as quantitatively. Assuming, of course, that there is some sort of queue or waiting line of high quality women who are willing to enlist.

TABLE 2

ARMY AFQT CATEGORY DISTRIBUTION BY ENTRY AGE AND SEX IN PERCENT FOR FY73 AND FY83

FY73			Male					Female		
Category	17	18-20	21-24	25+	Total	17	18-20	21-24	25+	Total
I	1.2	3.1	8.7	5.5	3.3	0.0	2.8	5.1	6.0	3.5
II	19.3	28.2	34.8	26.1	27.1	5.3	52.7	57.8	61.6	54.1
IIIA	23.7	23.0	19.3	18.8	22.7	5.3	42.3	35.1	32.3	40.2
IIIB	35.6	30.1	23.8	31.3	30.6	0.0	0.1	0.0	0.0	0.1
IV	20.5	15.8	13.5	18.4	16.6	0.0	0.0	0.0	0.0	0.0
N	33,534	108,205	17,271	2,171	161,181	19	6,163	1,652	502	8,336
FY83										
I	1.4	2.2	6.4	10.1	3.5	2.2	2.2	6.1	6.0	4.0
II	32.3	29.2	37.8	43.4	32.1	45.6	37.2	42.6	46.1	40.1
IIIA	35.4	23.9	20.9	19.2	23.9	40.9	34.5	27.9	29.0	32.4
IIIB	27.7	29.8	20.5	17.9	27.0	11.6	26.2	23.6	17.1	26.6
IV	3.4	15.1	14.8	9.6	13.7	0.0	0.2	0.1	0.1	0.1
N	9,126	76,069	22,235	8,045	115,475	756	9,456	4,042	2,245	16,499

Note: Column percentages may not sum to 100.0 percent due to rounding.

Source: Derived from Reference 8, page 71.

TABLE 3

ARMY EDUCATIONAL LEVEL DISTRIBUTION BY ENTRY AGE AND SEX IN PERCENT FOR FY73 AND FY83

FY73										
Education			Male					Female		
Level	17	18-20	21-24	25+	Total	17	18-20	21-24	25+	Total
Non-HSDG	81.0	35.1	24.1	37.3	43.5	0.0	9.1	11.9	19.4	10.2
HSDG	18.9	56.9	36.6	35.0	46.6	100.0	81.2	54.0	48.7	73.9
Some College	0.1	8.1	22.5	13.3	8.0	0.0	9.9	26.3	18.6	13.6
BA/BS+	0.1	0.1	17.1	14.7	2.1	0.0	0.1	8.0	13.6	2.5
Total	19.0	65.0	76.1	62.8	56.6	100.0	91.0	88.2	80.7	89.9
N	6,342	70,281	13,143	1,363	91,129	19	5,608	1,457	405	7,489
FY83										
Non-HSDG	41.7	11.8	12.6	10.2	14.2	0.0	0.1	0.2	0.2	0.1
HSDG	38.3	85.7	64.5	51.5	77.1	99.7	93.7	64.6	58.2	82.0
Some College	0.1	2.6	17.8	20.4	6.6	0.4	6.3	24.7	23.5	12.9
BA/BS+	0.1	0.1	5.3	18.0	2.3	0.0	0.1	10.7	18.2	5.1
Total	58.4	88.3	87.5	89.9	85.9	100.0	100.0	99.9	99.9	100.0
N	5,323	67,136	19,448	7,225	99,132	756	9,451	4,037	2,241	16,485

Source: Derived from Reference 8, page 47.

Attrition is a natural phenomenon for the military when it results from an expired term of service (ETS) or retirement. Accession and reenlistment quotas are designed to cope with expected personnel losses. Early attrition created by the inability of personnel to complete training is usually involuntary, costly, and a major concern for all components. However, the term "early attrition" takes on increased meaning in the reserve components. The reserves are concerned with the disposition of individuals after they are discharged as well as with the act of separating them. Reservists leaving before their ETS may:

- Resume only civilian activities;
- Transfer to the Individual Ready Reserve (IRR);
- Transfer to another troop program unit or reserve center; or
- Enter the active military components.

The military does not receive a significant return on its investment for personnel returning to civilian life or transferring to the IRR. Individuals who transfer to other TPU's allow the USAR to recoup part of the costs for training and recruiting. The Total Force, but not the USAR, benefits from the transfer of personnel to the active components.

The modest amount of literature explicitly pertaining to the Army Reserve focuses on the attrition and retention of personnel. Grissmer and Kirby (1985) estimated models for three categories of losses: 1) attrition during training; 2) attrition after training and before the completion of two years of service; and 3) total attrition over the two-year period. Personnel entering the IRR or returning to civilian life were distinguished from individuals joining active components or transferring to other reserve units. Marked differences in the preliminary analysis between males and females also caused Grissmer and Kirby to develop separate attrition models for the two groups. The single most important difference in the patterns for men and women is timing.

On average, females have a significantly higher attrition rate than do males. In the 1980 cohort study, males over 21 years had a higher quit rate than did males 17 to 20 years old. Older females had a lower attrition rate than the younger female population. This suggests that females in the 17-20 age group may be less suited than older females as an alternate supply of reserve manpower. Since the general age shift to an older U.S. population affects both males and females, women in the older market segment may merit further investigation.

The results from the cohort study concerning the attrition rates of older males relative to younger males appear to conflict with the global job satisfaction theory on age [Ref. 9 p. 412]. This theory states that job satisfaction increases with age, while turnover rates decrease with age. Moreover, the results are inconsistent with the Recruiting Command's desire to attract "an older, more stable" force [Ref. 6 p. 66]. Timing differences in the marital rates for men may be misleading in determining the effects of age. To date, the Recruiting Command has been unable to determine whether age or family status has the greatest effect upon attrition.

Grissmer and Kirby noted the marital rates increase with age for all males and black females between the of ages 25 to 29. Marital rates decline for white females in the same age group. Conflicts with the family and primary job are reasons most often cited for early attrition. Waite and Berryman (1985) noted active-duty males are more likely to leave the service when there is the birth of a child than when there is not.

Black females are less likely to disrupt their labor market participation as a result of marriage or childbearing than are white females. The differences in labor force participation between white and black females are, therefore, consistent with the findings indicating lower attrition rates for older females. Waite and Berryman also found that changes in marital status and pregnancy more often caused females to leave the service early than did marriage and the presence of children upon entry [Ref. 10 p. 59].

Several trends relevant to the quality of personnel are noted by Grissmer and Kirby. Findings from the 1980 cohort indicate:

- High-quality (AFQT category I-IIIA and high school graduate) personnel have substantially lower attrition rates than low-quality personnel.

- Enlisted women enter with higher AFQT scores than do enlisted men.

- High-quality personnel are more likely to transfer to another reserve unit or join the active military.

- The positive benefits of having higher quality females may be offset by their higher attrition rates.

Grissmer and Kirby hypothesized that the high attrition rates for high quality females may be partially attributable to their entry into nontraditional occupations. On the other hand, Waite and Berryman found that being in a traditionally male or female occupation had no effect upon the quit rate of active-duty women [Ref. 10 p. 76]. Egalitarian policies in the Regular Army have significantly reduced female attrition. Analysis of personnel policies in the USAR may provide a more plausible explanation for losses in AFQT categories I-IIIA. Federal enforcement of affirmative action was instrumental in lowering the turnover rates of women in industry [Ref. 11 pp. 604]. Having compared turnover in the military and civilian sector, Waite and Berryman conclude that the attrition rates for men and women will be similar if policies creating equal work conditions are implemented [Ref. 10 p. 76].

This study examines the personal and socioeconomic characteristics of USAR members and accessions to aid in determining the degree to which increased female participation can assist in meeting future manpower requirements. Analysis of the male and female membership is necessary to compare the characteristics of female members with those of their male counterparts. The methodology and data used in the construction of membership profiles are presented in Chapter II.

Chapter III and IV discuss profiles resulting from the study with respect to the personal, socioeconomic, and military characteristics of female members. Motivational factors influencing women to enlist in the USAR are discussed in Chapter V along with the net effect of demographic variations and military requirements. Finally, Chapter VI summarizes the findings of this study and reflects upon the costs and benefits associated with targeting women and older accessions as alternate sources of of reserve manpower.

II. METHODOLOGY

A. DATA BASE

For this study, information on the personal and military backgrounds of USAR members was furnished by the Defense Manpower Data Center (DMDC) in Monterey, California. The data source used to extract the information is the Reserve Component Common Personnel Data System (RCCPDS) Masters and Transactions file. RCCPDS is a comprehensive source of personnel records for guard and reserve components within the Department of Defense and the U.S. Coast Guard. Military personnel records are maintained on retired individuals as well as on the current membership.

Variables relevant to this study that were contained in the USAR enlisted membership file for March 1987 are shown in Table 4.

TABLE 4
CONTENT AREAS OF THE RESERVE COMPONENT COMMON PERSONNEL DATA SYSTEM (RCCPDS)

AREA	ITEM
PERSONAL BACKGROUND	Current Age
	Marital Status
	No. of Dependents
	Education
	Racial-Ethnic Group
	Sex
	Date of Birth
	Home State
	Home Zip Code
MILITARY BACKGROUND	Current USAR Experience
	Unit Identifier
	Unit Type
	Unit Zip Code
	Distance from Unit to Home Zip Code
	Primary MOS

(continued on next page)

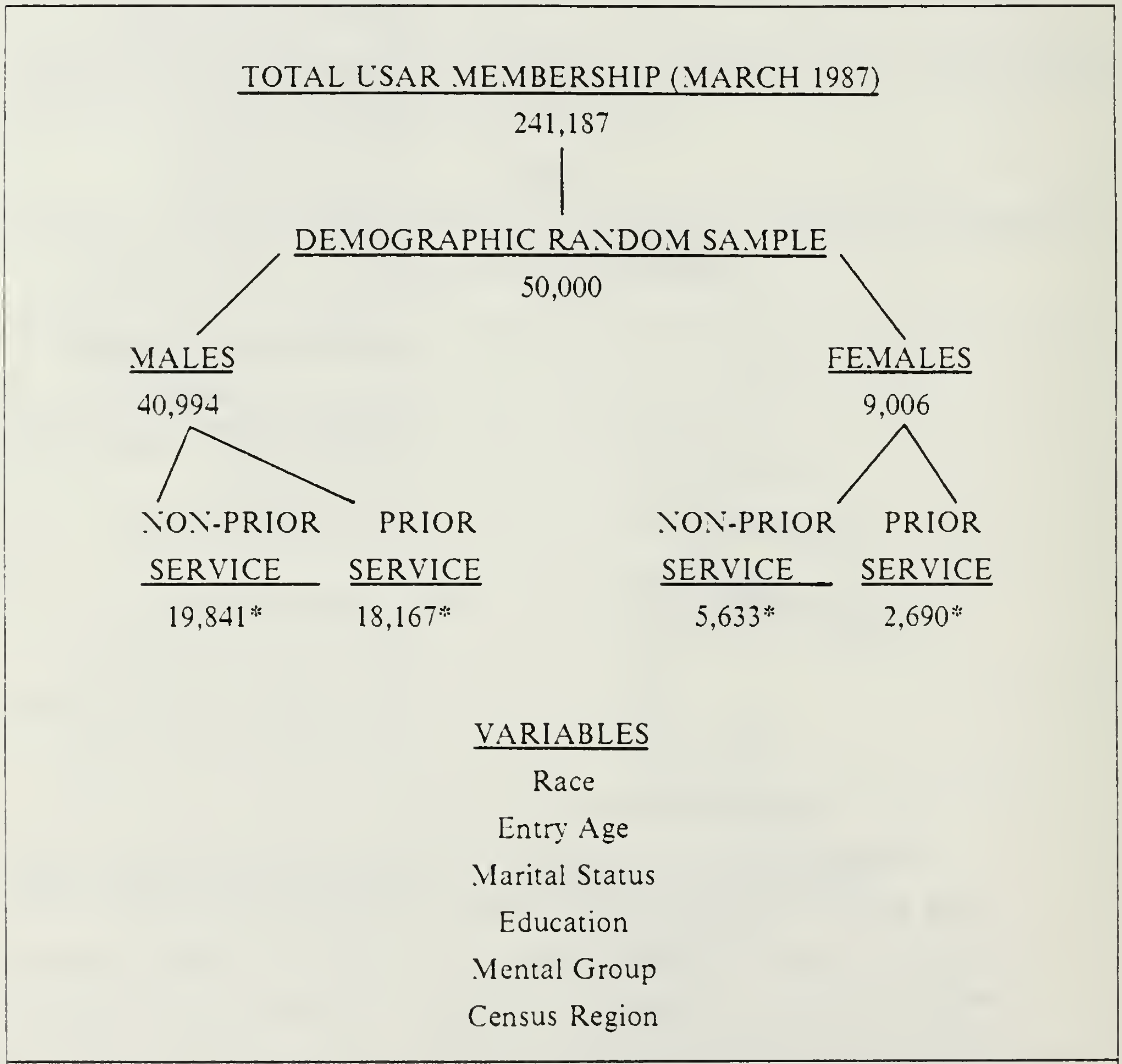
TABLE 4
CONTENT AREAS OF THE RESERVE COMPONENT COMMON PERSONNEL DATA SYSTEM (CONT'D)

AREA	ITEM
MILITARY BACKGROUND	Duty MOS
	Date of Initial Entry in USAR
	Pay Grade
	Entry Age
	Date of Last Enlistment
	Date of Expired Service Term
	Reserve Category
	Term of Enlistment
	Training Category
	Incentive Bonus Program
	Incentive Education Program
	Date of Incentive Program
	Source of Enlistment
	Mental Category Group
	ASVAB Version
	Total Retirement Points
(Active or Reserve)	Past Military Experience
	Entry Year in any Branch
	Months of Active Federal Service
	Separation Date from AFS

Personal background variables are used to test hypotheses on gender, racial-ethnic groups, veteran status, and differential age group participation. Current USAR experience allows hypothesis testing on the effect of military requirements and incentive programs. Trends in demographic variables may be analyzed by merging personal and military background information with human capital and socioeconomic variables from the National Longitudinal Survey (NLS) or an alternative data base. See Appendix A for the content area and items in alternative military and civilian data bases.

B. DATA SAMPLES

The total number of personnel cases contained in the USAR membership file for March 1987 is 241,187. A random sample of 50,000 cases utilizing SPSSX is used to develop a profile of the personal and socioeconomic characteristics for enlisted USAR members. The sample population is subdivided by gender and veteran status. The two subpopulations were examined to determine whether the sample cells are large enough to analyze the effects of race and pay grade distributions for females. Figure 6 outlines these break downs and the variables analyzed to determine the overall demographic composition of the force. Frequency variables on sex, race, age, marital status, and

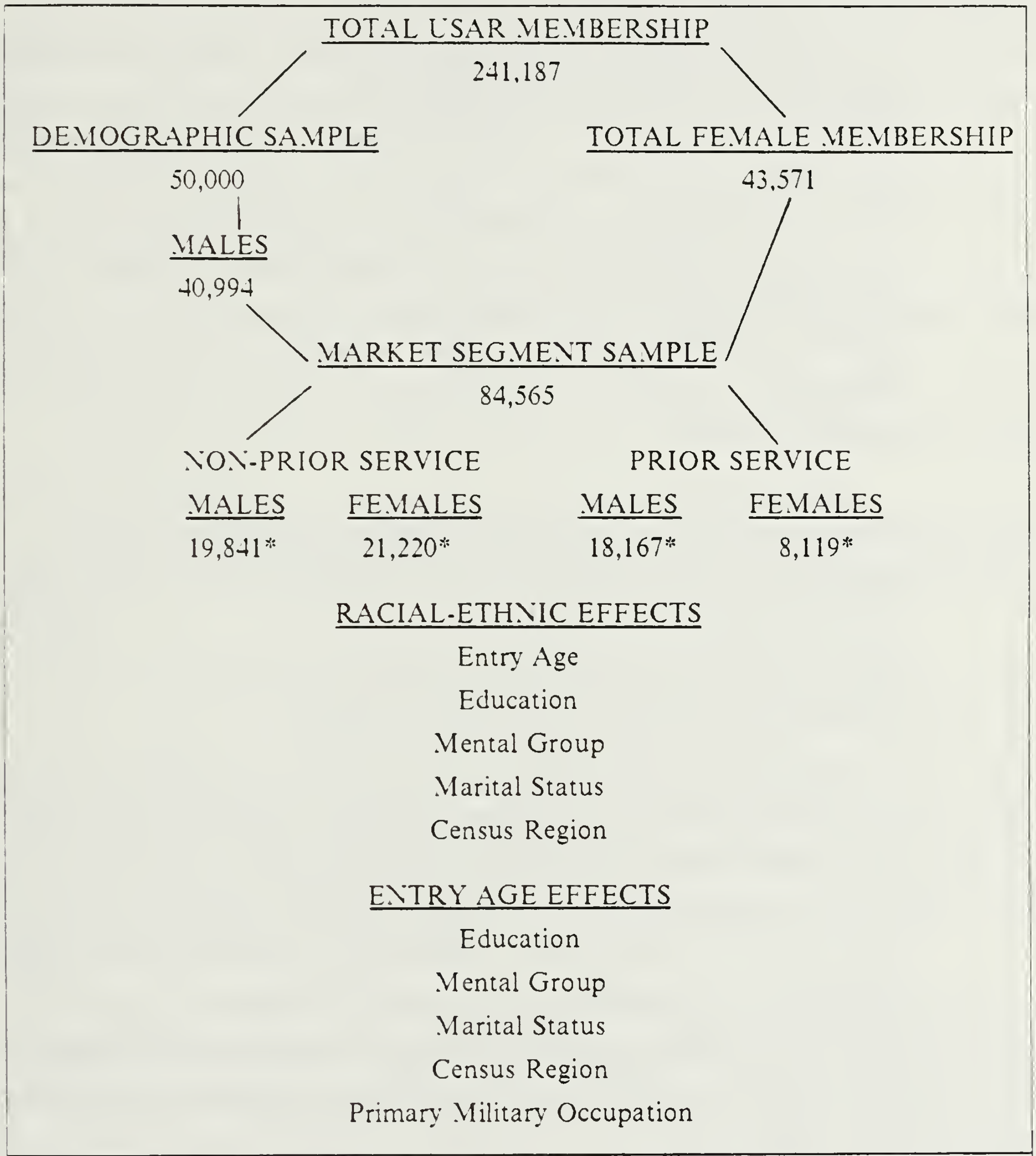


*Note: The sum of non-prior service and prior service members is not equal to the sum of men and women in the sample due to missing or undefined values for the term of enlistment.

Figure 6. Demographic Random Sample for March 1987 USAR Membership

pay grade in the sample were compared to frequency variables of the total USAR population to determine if the sample was, in fact, representative.

After establishing the demographic composition of the USAR enlisted membership, a second sample was used to examine trends associated with female participation in greater detail. The total female population (N = 43,571) is compared



*Note: The sum of non-prior service and prior service members is not equal to the sum of men and women in the sample due to missing values for the term of enlistment.

Figure 7. Market Segment Sample For March 1987 USAR Membership

with the stratified simple random sample of males (N = 40,994). The second sample is used in multiple crosstabulations to identify specific market segments and geographical regions with a high enlisted membership. Figure 7 shows the breakdown for the market segment sample.

C. DATA ANALYSIS

The data analyses are divided into two parts. The first analysis determines the demographic composition of the enlisted force for non-prior service and prior service personnel. A second analysis identifies market trends in the female population, racial-ethnic groups, and differential age groups for recruiting purposes. One assumes that individuals join the USAR because the perceived costs and benefits are in their own best interest. By analyzing the personal characteristics of members, one can determine which market segments of the population believed reserve service would benefit them and have, therefore, enlisted. Simple crosstabulations are used to analyze the demographic composition in terms of age, sex, education, mental group, marital status, and census regions.

Veteran Status: Prior service (PS) individuals have completed one or more terms of military service in an active or reserve component. Non-prior service (NPS) individuals are serving their initial service obligation and have been primarily recruited from the youngest market segment of 17- to 21-year olds. When comparing non-prior service to prior service personnel, NPS individuals are likely to be younger, single with no dependents, and have less educational attainment.

The military is a closed internal labor market. Prior service individuals seeking to be retained or promoted are afforded the opportunity to increase their education level and to improve their Armed Forces Qualification Test (AFQT) scores. AFQT scores are used to determine enlisted soldiers' aptitude categories. The screening process inherent with an internal labor market allows the military to observe the job performance of individuals and to retain and promote only the highest quality personnel. As a result, the percentage of prior service personnel in AFQT category I-IIIA is likely to be greater than the percentage of non-prior service personnel in the upper categories.

Marital Status: In general, primary labor market participation is greater for men than it is for women. The labor force participation of married women is considerably less than that of single women. Married women are more likely to interrupt their careers for a family and have an alternate source of income. White women are more likely to leave the labor market for childbearing and child-rearing than are black women. [Ref. 13 pp. 103-107]

Grissmer and Kirby noted in their 1982 cohort study on USAR and Army National Guard attrition that 85 percent of NPS enlistees were single, but that many married before the end of their initial service obligation. The marriage rates for white men and women were higher than those of black men and women. Marital rates for white and black men and black women steadily increased for ages 18 to 29 years. Marital rates for white females increased between the ages 18 to 24 years, and then, decreased slightly for those 25 to 29 years old.

Based upon inferences from primary labor market participation and the reserve study conducted by Grissmer and Kirby, It is hypothesized that:

- ***Men will be married and have dependents more often than women for both NPS and PS personnel.***

- ***More NPS white men and women will be married and have dependents than NPS black men and women.***

- ***More PS black women will be married and have dependents when*** compared ***to PS white women. However, the opposite will be true when PS black men are compared to PS white men.***

Age: For the military, age is the most complex variable to analyze due to its interaction with other variables. In this study, age is expected to be significant in analyzing differentials in male-female participation, marital status, education level, and mental group classification of USAR members. The interaction of age with race, sex, and an individual's marital status was previously addressed; therefore, I will focus on the effects age has upon the education level, mental group classification, and occupational choices of USAR members.

Eitelberg et al. (1984) conducted studies on the subpopulation differences for the American youth population. A summary of the study revealed that the average AFQT scores increased with age and that aptitude test performance is strongly correlated with the amount of formal education possessed by an individual. High school graduates had higher AFQT scores than non-high school graduates. The AFQT scores for recipients of high school equivalency certificates scored between these two groups. [Ref. 14 p. 62]

Furthermore, age may also affect the occupational choices of individuals. Both men and women who enlist at older ages may choose less physically demanding occupational specialties than do younger service members. It is hypothesized that:

- *The percentage of men and women who are high school graduates and above will increase as entry age increases for NPS and PS personnel.*

- *The percentage of men and women in AFQT categories I-IIIA will increase as entry age increases for NPS and PS personnel.*

- *The percentage of personnel enlisted in combat support and combat service support specialties will increase as entry age increases for NPS personnel.*

Racial-Ethnic Groups: Based on findings from the "Profile of American Youth," whites score higher on the AFQT than do blacks and Hispanics. Hispanics tend to score higher than blacks. In this particular study, racial-ethnic groups categorized as "others" were included with whites.[Ref. 14 p. 62]

Since the military uses education level as a screening tool in conjunction with the AFQT, the lower aptitude test scores of non-whites may be offset, in part, by their having higher educational attainment. This is not meant to imply that the military substitutes an individual's education level for the aptitude criteria. High school graduates and above are perceived by the military as desirable because the personal attributes associated with their having completed high school are indicative of their ability to adapt to military life [Ref. 14 p. 21]. However, if given the choice between a non-high school graduate with a relatively low aptitude score and a high school graduate with an even lower low aptitude score, the latter of the two individuals is generally preferred. It is hypothesized that:

- *More white service members will be in AFQT categories I-IIIA than will black and Hispanic service members for both NPS and PS personnel.*

- *There will be more Hispanics than blacks in mental categories I-IIIA for NPS and PS personnel.*

- *In turn, more blacks will be high school graduates and above. Hispanics will have the second highest percentage, and whites will have the lowest educational attainment. This is hypothesized for NPS and PS personnel.*

Sex: The "Profile of American Youth" indicated the average AFQT scores of males and females are similar. Women tend to score higher on the administrative composite, while men tend to score higher on the mechanical, electronic, and general composites [Ref. 14 p. 62]. A study, previously noted, showed that the percentage of females in the upper mental categories is slightly higher than the percentage of males in the same categories. These conflicting results may be attributable to greater selectivity in accepting female enlistees since there are still ceilings imposed upon female participation. Both studies were conducted around the same time; therefore, the entry requirements for males and females should have been the same. The educational attainments of females are generally agreed upon as being higher than those of males. It is hypothesized that:

- *More NPS females will be in AFQT category I-IIIA than will NPS males.*

- *More NPS females will be high school graduates and above when compared to NPS males.*

- *The AFQT category and education level of PS males and females will be similar.*

D. STRENGTHS AND LIMITATIONS

The data used for this study are cross-sectional. Trends observable only over a period of time cannot be analyzed. Changes in the status of individuals may occur at any time, and there is a lag time involved in updating their official military personnel records. Although a sufficient amount of time was allotted for the membership files to be updated after the end of the fiscal year, some transactions may have been processed at the unit level after the designated cutoff.

Another constraint concerns the volume of cases in which variables are missing or undefined. Using SPSSX to split the cases by term, sex, and race revealed a number of cases had to be eliminated from the sample for these reasons. The effective sample size and the number of missing cases for each variable analyzed have, therefore, been recorded in the findings of this study.

Although this study does not merge information on the demographic composition of the USAR membership with econometric variables, personal and military background variables are stratified by census regions. The census regions used coincide with the regions routinely designated for the analysis of economic variables. Appendix A lists civilian and military data bases, other than the National Longitudinal Survey, that can be used in conjunction with this study for future analysis on the effects of economic variables.

III. SOCIOECONOMIC PROFILES OF MEMBERSHIP

Chapter III presents socioeconomic profiles for the total enlisted membership. Personal attributes that are critical for military effectiveness are stratified by sex, veteran status, racial-ethnic group, and entry age. The March 1987 cross-sectional samples used to develop the profiles provided information on unit type, unit zip codes, and home zip codes. This information, which was not readily available for previous studies, is very valuable in evaluating reserve market trends at the local level. Moreover, the RCCPD file for March 1987 contained the most recent data available for the analysis of socioeconomic variables reflecting upon the characteristics of Army reservists.

A. COMPOSITION OF TOTAL MEMBERSHIP

Analysis of the demographic sample in Figure 6 indicates that the enlisted force was 81.9 percent male and 18.1 percent female at that time. Membership by racial-ethnic group, as shown in Table 5, was largest for whites at 62.8 percent and was second largest for blacks at 28.4 percent. Based upon the 1980 survey from the U.S. Bureau of Census, whites are 79.8 percent of the U.S. population and blacks are 11.5 percent. Hispanics and others represented 5.7 percent and 3.1 percent of the force, respectively. Hispanics make up 6.5 percent of the nation, while American Indians, Alaskans. Asians, and Pacific Islanders represent 2.2 percent.

Entry age was skewed towards youth, with the 17- to 20-year-old market segment accounting for 56.7 percent of the total membership. However, the sample also contained a sizable portion (26.1 percent) of men and women who entered from the 21- to 24-year-old market segment. A little over half (52.8 percent) of the enlisted members were single with no dependents. Approximately half (50.7 percent) of the March 1987 enlisted membership came from three of ten census regions. Membership was greatest for the South Atlantic, East North Central, and Middle Atlantic regions. Membership by state and territory for each census region are given in Appendix C.

To simplify the analysis, the educational levels of members have been consolidated, based upon behavioral characteristics, into three categories: 1) non-high school graduates, 2) in high school, and 3) high school graduates and above. From a behavioral viewpoint, individuals with equivalency certificates more closely parallel non-high school graduates in their ability to adapt to military life and job performance. Enlistees who are high school students were distinguished from graduates and

TABLE 5
DEMOGRAPHIC COMPOSITION OF THE USAR ENLISTED MEMBERSHIP SAMPLE FOR MARCH 1987
(IN PERCENT)

VARIABLE	MALE	FEMALE	TOTAL
RACE			
White	53.6	9.2	62.8
Black	20.8	7.6	28.4
Hispanic	4.9	0.8	5.7
Other	2.6	0.5	3.1
Missing cases			696
ENTRY AGE			
17-20 yrs.	46.3	10.4	56.7
21-24 yrs.	21.6	4.5	26.1
25-29 yrs.	8.8	2.5	11.3
30-34 yrs.	4.3	1.5	5.9
Missing cases			7,496
MARITAL STATUS			
Single, no dependents	42.1	10.7	52.8
Single, w/dependents	4.2	2.3	6.5
Married, no dependents	0.9	0.7	1.6
Married, w/dependents	34.8	4.3	39.1
Missing cases			1,380
AFQT CATEGORY			
I	8.1	1.9	10.0
II	25.2	5.7	30.9
III-A	16.7	4.1	20.8
III-B	21.6	5.7	27.3
IV	10.4	0.7	11.1
Missing cases			5,756

TABLE 5 - (Cont'd)
DEMOGRAPHIC COMPOSITION OF THE USAR ENLISTED MEMBERSHIP SAMPLE FOR MARCH 1987
(IN PERCENT)

VARIABLE	MALE	FEMALE	TOTAL
EDUCATION			
Non-HSDG	13.8	1.7	15.5
In HS	5.1	1.2	6.3
HSDG & Above	63.1	15.1	78.2
Missing cases			1,093
CENSUS REGION			
New England	4.4	0.8	5.1
Middle Atlantic	13.6	2.8	16.4
South Atlantic	13.7	3.8	17.5
East North Central	14.0	2.8	16.8
East South Central	6.2	1.5	7.7
West North Central	7.6	1.6	9.2
West South Central	9.0	1.9	10.9
Mountain	3.5	0.7	4.2
Pacific	7.9	2.0	9.9
Territories	2.1	0.2	2.4
Missing cases			28
SAMPLE			50,000

non-graduates since no conclusions have been drawn about their behavior characteristics. The findings revealed a majority of the force (78.2 percent) were high school graduates and above, and 61.7 percent of the members were in AFQT category I-IIIA.

B. MALE-FEMALE MEMBERSHIP COMPARISONS

Differences in male and female membership attributes are shown in Table 6. Race had the most noticeable effect upon the membership of men and women. The proportion of black women among all women was approximately one and two-thirds times as great as that of black men among all men (42.3 percent versus 25.4 percent).

TABLE 6
DEMOGRAPHIC COMPOSITION OF THE USAR ENLISTED MEMBERSHIP SAMPLE BY SEX FOR MARCH 1987 (IN PERCENT)

VARIABLE	MALE	FEMALE
RACE		
White	65.4	50.8
Black	25.4	42.3
Hispanic	6.0	4.2
Other	3.2	2.6
Missing cases	572	124
ENTRY AGE		
17-20 yrs.	57.1	54.8
21-24 yrs.	26.6	23.9
25-29 yrs.	10.9	13.3
30-34 yrs.	5.4	8.0
Missing cases	6,526	970
MARITAL STATUS		
Single, no dependents	51.4	59.6
Single, w dependents	5.1	12.6
Married, no dependents	1.1	4.0
Married, w dependents	42.4	23.8
Missing cases	1,130	250
AFQT CATEGORY		
I	9.9	10.1
II	30.7	31.7
III-A	20.3	22.7
III-B	26.3	31.6
IV	12.7	3.9
Missing cases	4,758	998

TABLE 6 - (Cont'd)

DEMOGRAPHIC COMPOSITION OF THE USAR ENLISTED MEMBERSHIP SAMPLE BY SEX FOR MARCH 1987 (IN PERCENT)

VARIABLE	MALE	FEMALE
EDUCATION		
Non-HSDG	16.8	9.6
In HS	6.2	6.7
HSDG & Above	76.9	83.6
Missing cases	887	216
CENSUS REGION		
New England	5.3	4.2
Middle Atlantic	16.6	15.6
South Atlantic	16.7	21.0
East North Central	17.1	15.4
East South Central	7.6	8.4
West North Central	9.3	8.7
West South Central	10.9	10.7
Mountain	4.2	3.9
Pacific	9.7	10.8
Territories	2.6	1.3
Missing cases	19	9
SAMPLE	40,994	9,006

It appears, not only do black women find USAR membership more attractive than other women, but that black women find USAR membership relatively more attractive than do black men.

The entry age of women followed a similar pattern as that of men, although the percentage of women entering the USAR from the two oldest market segments was slightly higher: approximately 21.3 percent of the female membership entered reserve service between the ages of 25 to 34 years compared to 16.3 percent of the male membership. Statistics for the difference between two sample means were used to test for the differences in continuous variables by gender. Women had a mean entry age of

21.4 years compared to 20.9 years for males in this sample. The mean entry age of women differs significantly from the mean entry age of men at the .01 level.

As hypothesized, fewer women than men were married and had dependents. However, the percentage of single women with dependents was more than twice as large as the percentage of single men with dependents (11.9 percent versus 5.1 percent). However, caution must be exercised in interpreting results on the marital and family status of service members.

When service members were married to each other, neither spouse was considered to be the dependent of the other. If there were no children or other legal dependent, both service members' records indicated that he or she was married with no dependents. In the event the married couple had children or legal dependents, one spouse was recorded as married with dependents, and the other spouse was recorded as married with no dependents. Since service members married to other service members were not distinguished from those married to civilians, the results on dependency for married individuals are subject to possible misinterpretations.

Overall, the educational attainment and AFQT categories were slightly higher for women than for men. High school graduates made up 83.6 percent of the female membership and 76.9 percent of the male membership. The membership of high school students was similar for men and women at 6.2 and 6.7 percent, respectively. The mean education level for women was 14.1 years compared to 13.3 years for men. This difference in the mean years of education by gender was significant at the .01 level in the two-tailed probability test.

The percentage of personnel in AFQT category I-IIIA was about the same for men and women. Men had a considerably larger percentage of individuals in AFQT category IV and a smaller percentage in category IIIB. The end result being that 64.5 percent of the female membership was in the upper AFQT category I-IIIA compared to 60.9 percent of the male membership. The mean AFQT score was 51.4 for men and 53.9 for women. The mean AFQT score for women differs significantly from that of men at the .01 level.

Membership by census regions was similar for men and women. The Middle Atlantic, South Atlantic, and East North Central regions accounted for 51.4 percent of the male members and 52.0 percent of the female members.

C. VETERAN STATUS MEMBERSHIP COMPARISONS

Table 7 stratifies the 50,000 male-female membership sample by veteran status. Overall, the results were consistent with the differences expected in a comparison of non-prior service personnel with prior service personnel. Non-prior service personnel were usually younger, single with no dependents, and had lower educational levels. There was also a smaller percentage of non-prior service personnel in the upper AFQT categories.

The most noticeable difference for veteran status was in the marital status of prior service men and women. Only 36.8 percent of the PS women were married with dependents compared to 70.9 percent of the PS men. However, the percentage of PS single women with dependents (22.4 percent) was considerably higher than that of PS single men with dependents (7.8 percent).

Membership for prior service personnel when compared to non-prior service personnel decreased for whites, others, and Hispanic women. The membership of Hispanic men increased from 5.3 percent in the NPS category to 6.9 percent in the PS category. Both male and female membership increased for blacks. General labor force, age-participation profiles published by the U.S. Bureau of Census were used to formulate hypotheses concerning the membership of men and women from different racial-ethnic backgrounds. The increased labor force participation/membership of black women compared to white women was expected; however, the increased participation/membership of black men compared to white men was somewhat counter-intuitive.

In general, labor force participation increases more for white men in all age groups when compared to black men [Ref. 13 pp. 104-105]. Black male participation increased from 23.1 percent in the NPS membership to 27.9 percent in the PS membership. Black female participation followed a similar pattern increasing from 41.0 percent for NPS personnel to 44.3 percent for PS personnel. Racial-ethnic effects and entry age differences are analyzed in greater detail in the following subsections.

More PS females (36.9 percent) entered between the ages of 25 to 34 years than PS males (26.5 percent). The remaining prior service males and females were almost evenly divided between entry from the two youngest market segments. Since PS personnel must have completed one or more terms of active or reserve duty, the large percentage of individuals in the 17- to 20-year-old market segment may be attributable to shorter (two-year) enlistments in the Regular Army.

TABLE 7
DEMOGRAPHIC COMPOSITION OF THE USAR ENLISTED MEMBERSHIP SAMPLE BY VETERAN STATUS AND SEX FOR MARCH 1987
(IN PERCENT)

	NON-PRIOR SERVICE		PRIOR SERVICE	
VARIABLE	MALE	FEMALE	MALE	FEMALE
RACE				
White	67.8	51.8	62.8	49.9
Black	23.1	41.0	27.9	44.3
Hispanic	5.3	4.6	6.9	3.4
Other	3.8	2.6	2.4	2.4
Missing cases	180	35	85	22
ENTRY AGE				
17-20 yrs.	74.8	65.6	35.8	31.9
21-24 yrs.	17.6	20.9	37.7	31.1
25-29 yrs.	5.7	9.0	17.1	22.6
30-34 yrs.	1.9	4.5	9.4	14.3
Missing cases	1,787	368	3,940	439
MARITAL STATUS				
Single, no dependent	81.2	74.3	19.8	36.0
Single, w dependent	2.6	7.7	7.8	22.4
Married, no dependent	0.1	2.9	1.5	4.8
Married, w/ dependent	16.1	15.1	70.9	36.8
Missing cases	394	50	384	42
EDUCATION				
Non-HSDG	19.2	9.8	14.3	8.9
In HS	12.2	10.2	0.1	0.0
HSDG & Above	68.7	80.1	85.7	91.0
Missing cases	294	65	347	88
AFQT CATEGORY				
I-IIIA	58.4	57.2	63.9	81.4
IIIB	27.9	40.1	24.4	13.1
IV	13.6	2.8	11.7	5.5
Missing cases	1,797	405	2,193	416

TABLE 7 - (Cont'd)
DEMOGRAPHIC COMPOSITION OF THE USAR ENLISTED MEMBERSHIP SAMPLE BY VETERAN STATUS AND SEX FOR MARCH 1987 (IN PERCENT)

	NON-PRIOR SERVICE		PRIOR SERVICE	
VARIABLE	MALE	FEMALE	MALE	FEMALE
CENSUS REGION				
New England	5.7	4.2	5.3	4.2
Middle Atlantic	16.2	15.8	16.6	15.6
South Atlantic	13.5	18.9	16.7	21.0
East North Central	19.2	16.6	17.1	15.4
East South Central	7.1	8.7	7.6	8.4
West North Central	10.8	9.5	9.3	8.7
West South Central	11.0	10.7	10.9	10.7
Mountain	4.8	4.2	4.2	3.9
Pacific	9.6	10.1	9.7	10.8
Territories	2.0	1.3	2.6	1.3
Missing cases	7	3	11	4
SAMPLE	19,841	5,633	18,167	2,690

As hypothesized, the education level and AFQT categories for NPS females were higher than those for NPS males. The education level and AFQT categories for PS males and females were expected to be similar since they must achieve specified military standards to stay competitive for promotion and retention. The findings of this study indicated a higher percentage of PS women were high school graduates and above and in the upper AFQT categories. The gender differences for PS personnel, however, were not as great as the gender differences for NPS personnel.

IV. ANALYSIS OF THE USAR MARKET SAMPLE

Chapter IV gives the results of the market sample in Figure 7 that was used to examine the net effect of multiple variables on membership. Since the market sample includes a sample of the male USAR membership and the total female USAR population, no statistical inferences can be made. The female population rather than a sample was used to more closely examine the attributes of Hispanic and other women who represent a very small percentage of the total USAR membership.

The military utilizes analyses of its non-prior service membership to determine how it can effectively use advertising and other recruiting resources to attract specific market segments in the society-at-large. Analyses of its prior service membership is of more benefit in determining what retention standards and reenlistment objectives should be established. As a result, the two military subgroups were analyzed separately.

Appendix C contains tables for the total USAR membership. Entry age, education level, AFQT category, marital status, and the membership in census regions are stratified by racial-ethnic groups and sex. In addition, these variables are also stratified by entry age and sex. Appendices D and E give the results on the multiple crosstabulation of all variables for non-prior service and prior service members, respectively. A detailed explanation of the value labels used in Appendices C through E is given in Appendix B for the reader's clarification.

A. NON-PRIOR SERVICE MEMBERSHIP

Table 8 summarizes multiple crosstabulations for the non-prior service membership. Membership and the percentage of single members with no dependents drastically decreased for males and females as entry age increased. As hypothesized, the education level and AFQT category of service members increased with entry age for both sexes. Sex and entry age had a more profound effect upon the educational attainment of members than on their aptitude scores.

The percentage of men who were high school graduates and above steadily increased from 63.8 percent for personnel entering between the ages of 17 and 20 years to 90.2 percent for personnel entering between the ages of 30 to 34 years. There was a small fluctuation (-1.7 percent) in the educational attainment of non-prior service women between the ages of 25 to 29 years; however, the results showed a significant increase in the education level of women as entry age increased, overall.

TABLE 8
USAR NON-PRIOR SERVICE MEMBERSHIP
BY ENTRY AGE AND SEX (IN PERCENT)

		ENTRY AGE			
VARIABLE	SEX	17-20	21-24	25-26	30-34
MEMBERSHIP	Male	57.1	26.6	10.9	5.4
	Female	66.2	20.6	8.9	4.4
MARITAL STATUS	Male	88.6	68.3	43.8	28.4
Single, no dependents	Female	83.6	65.0	48.8	37.1
EDUCATION	Male	63.8	85.5	86.5	90.2
HSG & Above	Female	73.9	93.9	92.2	93.1
AFQT CATEGORY	Male	57.1	59.4	59.7	71.6
I-IIIA	Female	53.1	56.3	59.8	69.6

The percentage of men in the upper AFQT categories increased only slightly for members in the 21- to 24-year age group and the 25- to 29-year age group. There was a substantial increase in the percentage of AFQT category I-IIIA males for the 30- to 34-year olds. Non-prior service women showed increases in their AFQT category similar to those for men.

Table 9 summarizes racial-ethnic effects for the non-prior service membership. Gender had a greater effect on the marital status of members than did the effect of racial-ethnic groups. The percentage of single women with no dependents was similar for women in all racial-ethnic groups and was, overall, lower than the percentage of single men with no dependents. Hispanic men were the exception. Compared to other males, Hispanic men had a lower percentage of single members with no dependents at 72.6 percent, and others had the highest percentage at 84.4 percent.

The educational attainment of men and women followed the same pattern. Racial-ethnic effects were stronger than gender differences. Blacks had the highest percentage of personnel who were high school graduates and above; Hispanics had the second highest; and whites had the lowest percentage. Overall, the education level of women was higher than that of men within a given racial-ethnic group. Racial-ethnic groups were also noted to have an effect upon the membership of individuals currently attending high school. More whites and others entered reserve service as high school students when compared to blacks and Hispanics.

TABLE 9
USAR NON-PRIOR SERVICE ENLISTED MEMBERSHIP
BY RACIAL-ETHNIC GROUP AND SEX (IN PERCENT)

		RACIAL-ETHNIC GROUP			
VARIABLE	SEX	White	Black	Hispanic	Other
MARITAL STATUS Single, no dependent	Male Female	81.9 75.8	80.4 72.4	72.6 74.1	84.8 76.0
EDUCATION HSG & Above	Male Female	65.5 76.6	76.7 84.3	74.0 82.6	71.0 77.6
MEMBERSHIP for HS Students	Male Female	13.8 12.8	8.4 8.8	8.3 8.7	11.7 12.4
AFQT CATEGORY I-IIIA	Male Female	68.4 72.0	33.5 38.0	40.4 36.0	49.9 56.7

AFQT categories showed the most noticeable difference created by racial-ethnic effects. The percentage of women in AFQT category I-IIIA was higher than the percentage of men within a given racial-ethnic group with the exception of Hispanics. Hispanic men had a slightly higher proportion of members in the upper AFQT categories than did Hispanic women. In an inter-racial comparison, the percentage of whites in the upper aptitude categories was highest and almost twice as large as the percentage of blacks. Others had a larger percentage in the upper aptitude categories than did blacks and Hispanics.

B. PRIOR SERVICE MEMBERSHIP

Multiple variable effects on the prior service population for entry age are given in Table 10. Male and female membership decreased as entry age into reserve service increased. Although the percentage of single men with no dependents steadily decreased with entry age increasing, age did not affect the percentage of women in this marital status. The percentage of single women with no dependents was about the same for all entry age groups. Gender had a greater effect on the marital status of female service members than did entry age.

TABLE 10
USAR PRIOR SERVICE ENLISTED MEMBERSHIP
BY ENTRY AGE AND SEX (IN PERCENT)

		ENTRY AGE			
VARIABLE	SEX	17-20	21-24	24-29	30-34
MEMBERSHIP	Male	35.8	37.7	17.1	9.4
	Female	36.8	28.9	21.9	12.4
MARITAL STATUS	Male	26.8	16.6	15.6	9.2
Single, no dependent	Female	35.8	34.5	32.6	34.5
EDUCATION	Male	80.6	88.4	88.2	88.9
HSG & Above	Female	86.1	90.9	94.4	93.8
AFQT CATEGORY	Male	61.5	62.3	63.3	70.3
I-IIIA	Female	70.3	77.6	86.4	90.2

Entry age also did not have as significant an effect upon the education level of prior service personnel as it did upon non-prior service personnel. The only notable increase was between the 17- to 20-year group and the 21- to 24-year group for both males and females. Females had a slightly higher percentage of personnel who were high school graduates and above in all entry age groups.

AFQT categories increased with entry age. Increases for prior service females were more significant than those for prior service males. The percentage of women in AFQT category I-IIIA increased from 70.3 percent in the youngest market segment to 90.2 percent in the 30- to 34-year age group. The percentage of men in the upper aptitude categories increased from 61.5 percent to 70.3 percent from the youngest to the oldest market segment, respectively.

Table 11 shows the results of racial-ethnic groups in the multiple crosstabulations on the prior service membership. Black and other men had a higher proportion of members who were single with no dependents. The percentage of white and Hispanic men in the single, no dependent category were similar. Overall, women were more likely to be single with no dependents than were men for all racial-ethnic groups. Unlike black men, black women had the lowest percentage of single members with no dependents.

TABLE 11
USAR PRIOR SERVICE ENLISTED MEMBERSHIP
BY RACIAL-ETHNIC GROUP AND SEX (IN PERCENT)

		RACIAL-ETHNIC GROUP			
VARIABLE	SEX	White	Black	Hispanic	Other
MARITAL STATUS Single, no dependent	Male	17.5	24.9	16.5	28.1
	Female	40.4	31.2	34.6	37.0
EDUCATION HSG & Above	Male	86.0	85.2	85.2	85.7
	Female	90.8	91.4	85.7	86.1
AFQT CATEGORY I-IIIA	Male	77.3	39.7	38.4	57.4
	Female	87.7	70.7	65.9	71.9

Racial-ethnic groups were not a significant factor in the educational attainment of prior service males. The percentage of white and black women who were high school graduates and above were about the same and slightly higher than the percentages for Hispanic and other women. Overall, women had a larger percentage of high school graduates and above when compared to men. The differences between men and women in the prior service population were relatively small compared to gender differences in the non-prior service membership.

Racial-ethnic differences were, once again, most obvious for the AFQT categories. The pattern for prior service males was similar to the one for non-prior service males. White men had the highest proportion of individuals in the upper aptitude categories at 77.3 percent. Others were second highest with 57.4 percent. Blacks were third with 39.7 percent, and Hispanics were close to blacks with 38.4 percent.

Overall, women had a higher percentage of personnel in the upper AFQT categories than men within a given racial-ethnic group. Gender had an effect on

AFQT category nearly as strong as race. The percentage of personnel in the I-IIIA aptitude group started to converge for women in different racial-ethnic groups. White women had the highest percentage at 87.7 percent; others were second with 71.9 percent; blacks had 70.7 percent; and Hispanics had 65.9 percent in the upper AFQT categories. This was a dramatic increase in the percentage of non-whites in the upper AFQT categories when compared to non-prior service women or men in general.

C. CENSUS REGION PARTICIPATION: NPS AND PS

Tables 12 through 15 show the census regions with ***ten percent or more*** of the male or female membership stratified by entry age and racial-ethnic group. Territories and postal abbreviations for the states within each region are listed in Appendix B. Appendices C through E contain breakdowns on the membership of all census regions stratified by sex, veteran status, and entry age or racial-ethnic groups.

Based upon entry age in Table 12, the East North Central, Middle Atlantic, and South Atlantic yielded the greatest membership for both sexes. Female membership was slightly higher than male membership for all age groups in the South and Middle Atlantic. In the East North Central, the proportion of males was slightly larger than the proportion of females for individuals between the ages of 17 and 29 years. The 30- to 34-year groups in this region had similar membership proportions.

As entry age increased, the number of census regions with ten percent or more of the membership decreased. The most noticeable difference was the increased membership in the Pacific for the 30- to 34-year-old market segment.

The results in Table 13 show members in the other category were concentrated in the Pacific and Middle Atlantic with 34.9 percent and 18.0 percent, respectively. Hispanics were concentrated in the territories and West South Central regions; however, there were also sizable portions in the Middle Atlantic and Pacific. Blacks and whites were accountable for the large membership in the East North Central and South Atlantic. Members in all racial-ethnic groups were well represented in the Middle Atlantic. Membership was greatest for blacks in the South Atlantic and for whites in the East North Central.

Membership for the Pacific region in Table 14 was again noted to increase with entry age for prior service personnel. The proportion of the prior service members for both genders increased in the Middle Atlantic and South Atlantic for all age groups when compared to the non-prior service membership. Concurrently, there was a

TABLE 12
CENSUS REGIONS BY ENTRY AGE AND SEX FOR USAR NON-PRIOR SERVICE ENLISTED MEMBERSHIP
(IN PERCENT)

	17-20		21-24		25-29		30-34	
	M	F	M	F	M	F	M	F
East North Central	19.6	18.2	20.5	17.2	19.0	15.7	17.4	17.6
Middle Atlantic	16.4	17.9	14.7	18.7	17.8	18.5	15.7	18.6
South Atlantic	13.0	16.7	14.1	17.1	14.2	18.6	14.0	20.0
West South Central	11.0	10.7	11.8	12.3	12.2	11.2	----	----
West North Central	11.2	10.4	10.2	----	----	----	----	----
Pacific	----	----	----	----	----	----	17.2	10.0
Total	71.2	73.9	71.3	65.3	63.2	64.0	64.3	66.2

TABLE 13
CENSUS REGIONS BY RACIAL-ETHNIC GROUP AND SEX FOR USAR NON-PRIOR SERVICE ENLISTED MEMBERSHIP
(IN PERCENT)

	White		Black		Hispanic		Other	
	M	F	M	F	M	F	M	F
East North Central	21.6	19.7	17.7	16.8	----	----	----	----
Middle Atlantic	15.2	16.6	17.0	19.7	14.5	16.5	14.3	18.0
South Atlantic	10.9	11.5	24.4	26.1	----	----	----	----
East South Central	----	----	13.3	13.3	----	----	----	----
West South Central	----	----	14.9	11.8	20.8	25.9	----	----
West North Central	14.2	15.2	----	----	----	----	----	----
Pacific	----	10.0	----	----	12.7	12.8	46.1	34.9
Territories	----	----	----	----	30.2	28.9	----	----
Total	62.4	73.0	87.3	87.7	78.2	84.1	60.4	52.9

TABLE 14
CENSUS REGIONS BY ENTRY AGE AND SEX FOR USAR PRIOR SERVICE ENLISTED MEMBERSHIP
(IN PERCENT)

	17-20		21-24		25-29		30-34	
	M	F	M	F	M	F	M	F
East North Central	14.9	14.2	15.1	13.9	15.2	16.3	16.5	15.6
Middle Atlantic	16.7	18.2	16.6	21.0	14.3	22.0	15.6	18.3
South Atlantic	22.0	18.0	21.7	21.2	20.0	18.2	17.6	15.3
West South Central	----	12.3	10.2	10.4	11.5	10.9	10.3	----
West North Central	----	----	----	----	----	----	----	10.3
Pacific	----	----	----	----	10.2	----	11.0	12.6
Total	53.6	62.7	63.6	66.5	71.2	67.4	71.0	72.1

decrease in the prior service membership of personnel in the East North Central. Membership in the West South Central was fairly constant for non-prior service and prior service individuals.

The effect of racial-ethnic groups on membership in Table 15 was greatest for other women. In the non-prior service sample, these individuals were concentrated in the Pacific and Middle Atlantic regions; however, the prior service membership was more widely dispersed. The South Atlantic, West South Central and Mountain regions also contained a sizable portion of the membership for other women. The percentage of other PS men decreased in the Middle Atlantic and increased in the territories.

Racial-ethnic effects for blacks and whites of both genders were most noticeable in the South Atlantic. Membership increased for all in the the South Atlantic, and overall, decreased in the East North Central. The membership of black PS personnel decreased in the Middle Atlantic, while membership for white PS personnel increased.

D. ENTRY AGE AND OCCUPATIONAL CHOICES

Prior service personnel routinely seek and are encouraged to accept reserve positions in which they can utilize their former military training and experience. As a result, entry age was expected to be significant only in the occupational choices of the non-prior service membership. It was hypothesized that the proportion of personnel in combat support and combat service support would increase as entry age increased with the male membership particularly in mind.

The Department of the Army prohibits women from being assigned to occupational specialties and positions in which combat is probable. However, entry age could also affect the decision of women to choose between traditional and non-traditional occupations. Most of the occupations traditionally held by women are in the military's combat service support functional area, and a majority of the non-traditional occupations are in combat support. Therefore, the percentage of women in combat service support was expected to increase with entry age.

Results on the occupational choices of non-prior service members are shown in Table 16. Medical specialties were most noticeably affected by entry age. The proportion of NPS men steadily increased with age from 9.5 percent in the 17- to 20-year group to 18.7 percent in the 30- to 34-year group. The percentage of men in combat and combat service support specialties decreased as entry age increased. In the

TABLE 15

CENSUS REGIONS BY RACIAL-ETHNIC GROUP AND SEX FOR USAR PRIOR SERVICE ENLISTED MEMBERSHIP

(IN PERCENT)

	White		Black		Hispanic		Other	
	M	F	M	F	M	F	M	F
East North Central	17.2	15.9	13.6	14.5	----	----	----	----
Middle Atlantic	18.7	16.6	13.6	16.6	----	17.1	----	13.7
South Atlantic	15.6	14.8	35.5	33.3	----	----	----	14.9
East South Central	----	----	13.2	12.0	----	----	----	----
West South Central	----	----	12.6	10.1	18.4	21.8	----	15.4
West North Central	10.9	14.0	----	----	----	----	----	----
Pacific	----	13.1	----	----	11.9	12.0	47.9	20.6
Territories	----	----	----	----	43.7	26.6	10.1	----
Mountain	----	----	----	----	----	----	----	11.4
Total	62.4	74.4	88.5	86.5	74.0	77.5	58.0	76.0

TABLE 16
OCCUPATIONAL SPECIALTIES BY ENTRY AGE AND SEX
FOR USAR NON-PRIOR SERVICE ENLISTED MEMBERS
(IN PERCENT)

	MALES			
VARIABLE	17-20 yrs	21-24 yrs	25-29 yrs	30-34 yrs
COMBAT	18.2	17.8	15.3	12.4
COMBAT SUPPORT	42.8	42.7	42.1	36.9
COMBAT SERVICE SUPPORT	29.5	28.8	29.2	31.7
MEDICAL	9.5	10.7	13.3	18.7
RECRUITER	0.0	0.0	0.1	0.3
	FEMALES			
VARIABLE	17-20 yrs	21-24 yrs	25-29 yrs	30-34 yrs
COMBAT	0.8	0.7	0.7	0.1
COMBAT SUPPORT	15.4	17.7	16.0	15.2
COMBAT SERVICE SUPPORT	59.4	57.1	56.2	55.8
MEDICAL	24.4	24.5	27.1	28.9
RECRUITER	0.0	0.0	0.0	0.0

service support area, the percentage of men between the ages 21 to 29 years slightly decreased with age and the oldest market segment increased.

Recruiters are a special category of personnel that were distinguished from individuals in other service support specialties for future analysis of demand and supply constraints on enlistments. These individuals are routinely selected from the membership and are formally trained after the military has had the opportunity to observe their job performance in some other occupational specialty.

Contrary to what was expected, the percentage of women in service support specialties slightly decreased with entry age. The percentage of women in medical specialties slightly increased with age in the two oldest groups. A small number of women were placed in occupational specialties routinely regarded as a part of the combat functional area such as ammunitions and aviation operations. Their assignments in these specialties are limited to positions in which direct combat is improbable. The results showed a marked decrease in the number of 30- to 34-year-old women serving in this area.

V. ENLISTMENT MOTIVATIONS

Analyses of the total USAR membership and subpopulation differences answer questions about who enlists in the reserve component. Simply identifying who enlists is of little use in targeting specific segments of the general population unless questions concerning why certain individuals decided to enlist can also be answered. For this reason, Section IV analyzes the enlistment motivations of reserve accessions upon entry into the military.

A. BACKGROUND

Marketing is a contemporary discipline that has become essential for the continued success of the all recruited force, especially in a highly competitive labor market. The Army uses advertising, selling (i.e., recruiting), and public relations to compete with the civilian sector as well as other branches of the military for a sizable portion of the country's labor force. A fundamental principle of marketing philosophy stipulates that one should start with a knowledge of consumer needs, and then work backwards in developing services and products to satisfy them [Ref. 17, p. 12].

In the military, recruits are the consumers; therefore, the Army has made a concerted effort to understand what motivates individuals to enlist. One tool, instrumental in examining the demographics and motivations of Army recruits, is the New Recruit Surveys (NRS). These surveys were designed by the U.S. Army Research Institute (ARI) for the Behavioral and Social Sciences to answer specific questions that will aid the military in meeting future recruiting objectives. The content and focus of the survey questions are [Ref. 18 p. 53]:

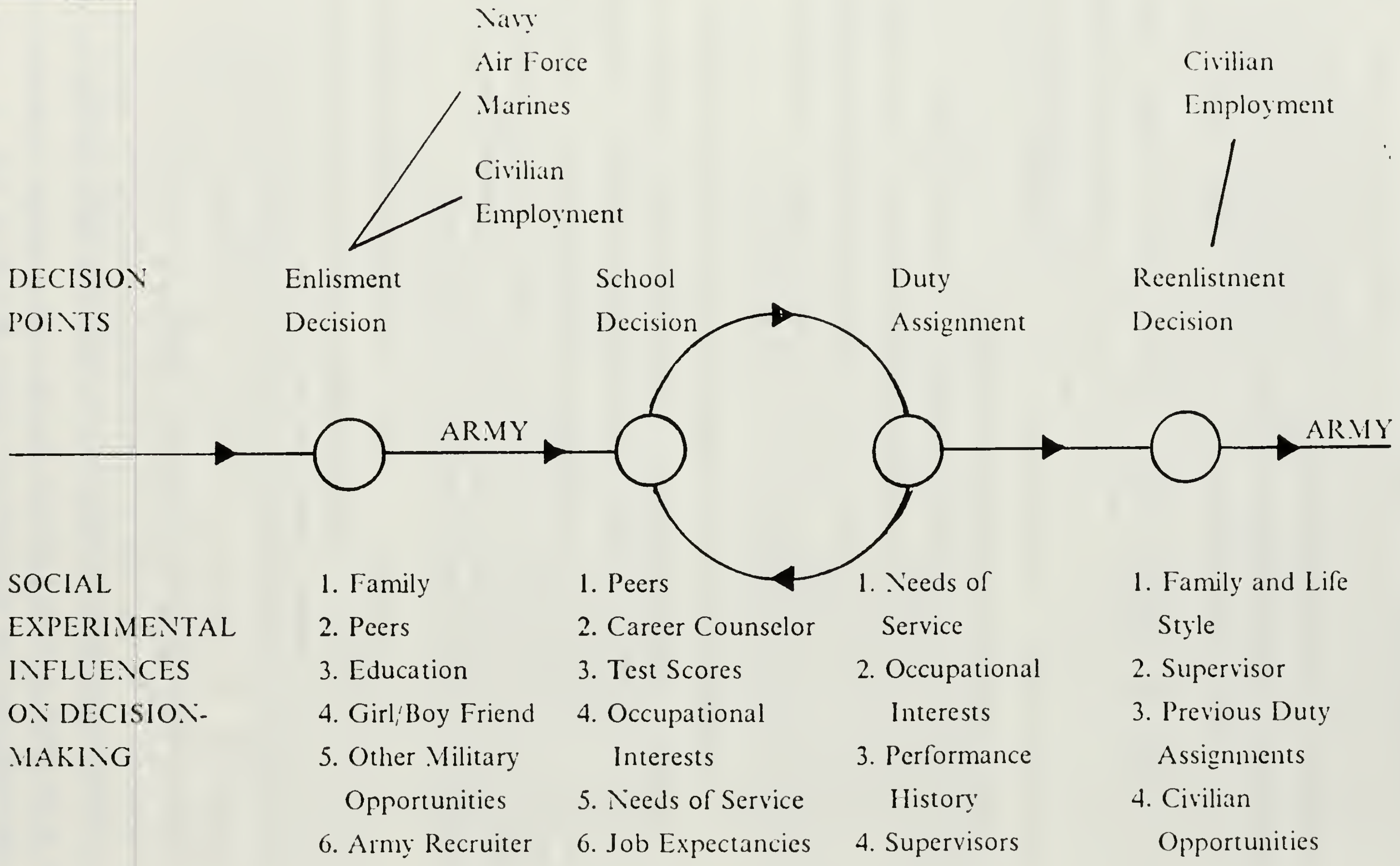
- To find out who and why individuals enlist;
- To gain information on how recruiting resources may be targeted to increase force quality;
- To determine the propensity of individuals to reenlist; and
- To identify which advertising and recruiting practices are successful.

From an organizational viewpoint, the military's goal is to attract a specified number of new recruits possessing the desired characteristics with the most economically efficient compensation package. Both tangible and intangible rewards are stressed in defining the personal utility or satisfaction that recruits will derive from military service. Advertising and recruiting are simply the promotional means through which the Army informs individuals of the economic, social, and career opportunities available to them. In the long term, both the needs of the military and recruits must be satisfied in the voluntary exchange that takes place; therefore, the New Recruit Surveys furnish the Department of the Army with the continuous feedback it needs to allocate recruiting resources effectively and to design efficient compensation plans.

Unlike past research efforts, the New Recruit Surveys note that some distinctions must be made in examining the enlistment motivations of Regular Army recruits and Army Reserve recruits. From the previous discussion on characteristics unique to the USAR, one should keep in mind that the USAR is concerned with the secondary labor force rather than the primary labor force. A vast majority of the individuals enlisting in the active component are recent high school graduates with little or no work experience. Individuals from the primary military market of 17- to 21-year-olds base their decision to enlist upon perceptions of the work environment rather than actual experience. Although a large percentage of the reserve force is from the primary military market, there are two obvious differences.

First, reservists from the youngest age group must often adjust to the military and a civilian work environment or college simultaneously. Personal adjustments of this nature increase the mobility of this subgroup and have an adverse effect upon attrition. Furthermore, the enlistment motivations of older reservists with work experience are likely to differ from those in the youngest age category. When the total composition of the USAR enlisted membership is considered, the post-high school population is too large a part of the force to be disregarded.

Schein (1983) described five stages of psychological development an individual experiences in defining the work environment. In the first stage, an individual gathers information from external sources and dreams about what he or she will do. The second stage occurs when the individual involves himself or herself with training for a particular job. In stage three, the individual obtains a job and must adjust his or her perceptions about the work environment to reality. Personnel attempt to enhance their job positions in the next stage by concentrating on learning the social and hierarchical rules of the organization. In stage five, the individual finally develops an awareness of his or her place in the organization as well as an awareness of personal contributions to the work group and organizational mission. [Ref. 18 pp. 1-5]



Source: *Office of Naval Research* [*See Ref. 19 p. 7*]

Figure 8. The Career Motivation Process: Key Decision Points and Influential Factors

Figure 8 shows a model of the career motivation process developed by Glickman. Although this model was developed for the Navy, it is equally applicable to other branches of military service. Differences in the motivational influences of non-prior service personnel when compared to prior service personnel are clearly illustrated. In making the enlistment decision, individuals focus more upon items pertinent to Schein's first and second stages in the psychological development process. Human capital investments and external information sources are particularly important in the enlistment decision. As individuals progress through the last three stages of their development, the reenlistment decision is influenced more by organizational and job-related factors.

B. ACCESSION SAMPLE

The 1986 ARI Survey of Reserve Accessions, referred to here as as the Reserve New Recruit Survey (RNRS), was used for this study to focus exclusively upon the motivational factors influencing the enlistment decision of non-prior service personnel. The survey was self-administered by recruits during their first week on active duty at a U.S. Army reception station. As a result, respondents were not influenced by their initial impression of the training environment. During the report period, June through August 1986, there was a total of 2,709 respondents. Only 0.2 percent (N = 6) had prior military experience. These individuals were excluded from the subsequent analyses identifying motivational influences by subpopulations; therefore, the effective sample size was 2,703.

Before analyzing the motivational influences of USAR accessions, the demographic composition of the RNRS respondents was compared to the demographic composition of all USAR non-prior service gains during FY86. This comparison was made to identify biased representativeness of attributes that might result in a misinterpretation of the data. Data on the USAR non-prior service gains were provided by published and unpublished reports from the Defense Manpower Data Center [Ref. 20].

Subsequently, economic and intrinsic factors influencing the enlistment decision were examined along with advertising and recruiting practices in terms of gender, racial-ethnic groups, entry age, and the quality of accessions. Crosstabulations were, again, used to identify variable trends or patterns in the subpopulations, and the significance of variables was tested using the Chi-Square statistic.

Since the survey was self-administered, a group of variables including sex, education, racial-ethnic group, age, and incentives were cross-referenced with each respondent's official personnel data for accuracy. With the exception of age at accession, cross-referenced variables in the survey were used for this study. The respondents' answers for age at accession were used since the cross-referenced variable had collapsed the categories, thereby limiting comparison with the data on FY86 non-prior service gains.

C. COMPOSITION OF FY86 USAR ACCESSIONS

The results in Table 17 indicate that women comprised 16.7 percent of the 1986 RNRS respondents and that men made up 83.3 percent of the new recruits. Membership patterns for racial-ethnic groups were similar to those observed for all FY86 non-prior service gains. Most noticeably, the membership of black women was twice that of black men.

The percentage of new recruits entering between the ages of 16 to 20 years of age was extremely high for both men and women at 87.4 percent and 81.8 percent, respectively. For the most part, this may be attributable to the ARI Survey's having been administered in the summer. Many USAR and Guard members attend training while on summer vacation from school. The demographic composition of RNRS respondents could not be compared to the FY86 USAR gains by both age and gender. A comparison of survey respondents and USAR gains by age only revealed that 86.5 percent of all RNRS respondents entered from the 16- to 20-year age group compared to 70.7 percent of the FY86 non-prior service gains.

This seasonal trend was also thought to be responsible for the high percentage of single recruits with no dependents and for differences in the education level of RNRS respondents and non-prior service gains. The percentage of single men with no dependents was extremely high at 92.4, and the percentage of single women with no dependents was slightly lower at 89.2. Crosstabulations of the education levels revealed 58.7 percent of the men and 44.1 percent of the women in the survey were high school students. In comparison, the summary statistics on all FY86 USAR gains indicated only 20.8 percent of the male accessions and 16.7 percent of the female accessions were in this education level.

When compared to the non-prior service gains, the percentage of men and women in AFQT category I-II was slightly higher for RNRS respondents. The reader should note that AFQT categories are listed twice in Table 17. The first set of AFQT

TABLE 17

DEMOGRAPHIC COMPOSITION OF 1986 RNRS RESPONDENTS AND FY86 NON-PRIOR SERVICE GAINS BY SEX (IN PERCENT)

	NEW RECRUITS		FY86 NPS GAINS	
VARIABLE	MALE	FEMALE	MALE	FEMALE
RACE				
White	73.1	53.5	70.7	54.4
Black	19.1	40.3	21.5	39.2
Hispanic	4.5	3.1	7.8	6.4
Other	3.3	3.1		
Missing cases	7	2	382	127
AGE AT ACCESSION				
17-20 yrs.	87.4	81.8	----	----
21-24 yrs.	9.1	10.4	----	----
25-29 yrs.	2.9	4.4	----	----
30-34 yrs.	0.6	3.3	----	----
Missing cases	1	0	----	----
MARITAL STATUS				
Single, no dependents	92.4	89.2	----	----
Single, w/ dependents	3.3	5.2	----	----
Married, no dependents	1.7	0.9	----	----
Married, w/ dependents	2.6	4.7	----	----
Missing cases	86	5	----	----
AFQT CATEGORY				
I-II	40.9	34.4	38.0	33.1
III	50.2	64.7	52.4	66.8
IV	8.9	0.9	9.6	0.1
Missing cases	16	3	642	18
EDUCATION				
Non-HSDG	6.7	0.0	18.4	2.3
In HS	58.6	44.1	20.8	16.7
HSDG & Above	34.7	55.9	60.7	81.0
Missing cases	0	0	2,630	709

TABLE 17 - (Cont'd)
DEMOGRAPHIC COMPOSITION OF 1986 RNRS RESPONDENTS AND FY86 NON-PRIOR SERVICE GAINS BY SEX (IN PERCENT)

VARIABLE	NEW RECRUITS MALE	NEW RECRUITS FEMALE	FY86 NPS GAINS MALE	FY86 NPS GAINS FEMALE
QUALITY				
High	21.1	34.4	----	----
Indeterminant	44.5	30.4	----	----
Low	34.4	35.3	----	----
Missing cases	72	3	----	----
AFQT CATEGORY				
I-IIIA	66.5	64.7	----	----
IIIB	24.6	34.4	----	----
IV	8.9	0.9	----	----
Missing cases	16	3	----	----
SAMPLE	2,252	451	25,961	7,938

categories are coded differently from previous results for the purpose of comparing the data on survey respondents and non-prior service gains. Most noticeable is the fact that that only 0.1 percent of all non-prior service women accessions were in AFQT category IV compared to 9.6 percent of all non-prior service men. A significant difference in the mental aptitude of men and women was reflected in the survey; however, these differences appear to be greater than indicated by the sample.

A new variable, quality, was added to the demographic composition for RNRS respondents. The new variable was created in this study using cross-referenced variables for the education level and the 1980 youth norms for aptitude. The value label, high, indicates individuals who are high school graduates and in AFQT category I-IIIA. Indeterminant is the value assigned to recruits who are high school students and in AFQT category I-IIIA. Low denotes individuals in AFQT category IIIB or IV regardless of their education level. Again, the divisions in education were based upon their observed relationship with the behavior and job performance of soldiers.

Women had a higher percentage of new recruits in the high quality category than did men. This was expected since women tend to join the military at older ages and have higher educational attainment. As previously noted, AFQT scores increase with age. The high percentage of female recruits in the low quality group was attributable to the combined effects of gender and racial-ethnic groups. Overall, blacks tend to score lower on the AFQT test. A large percentage of black women are in the AFQT category IIIB, and 40.3 percent of all female accessions were black.

D. ECONOMIC INFLUENCES

The 1986 ARI Survey asked respondents whether the economic variables listed in Table 18 were important in their decision to enlist. Both compensation and human capital factors were included. Responses ranged from ***not at all important*** to ***I would not have enlisted except for this reason***.

For purposes of determining the relative importance of economic variables to survey respondents, the four event response scale was dichotomized into two groups: important and not important. If the response was "not at all important" or "somewhat important," it was coded 0. If the response was "very important" or "I would not have enlisted except for this reason," it was coded 1. A Chi-Square test of independence with gender was then conducted for each economic influence factor. Asterisks in the tables indicate the level of significance of the associated Chi-Square statistic for each test of independence.

Men and women rank-ordered the importance of economic variables in the same manner. A significantly higher percentage of women than of men indicated money for college and skill training were important reasons for enlisting. A higher percentage of men than of women indicated retirement benefits and working with high-tech equipment were important. Money for college, skill training, and retirement benefits were significant at the .01 level, and working with high-tech equipment was significant at the .05 level. Tables for subpopulation differences other than sex and racial-ethnic groups are given in Appendix F.

Individuals in the two oldest entry age groups rank-ordered economic influences differently from the younger accessions. For the 30- to 35-year age group, the importance of skill training, retirement benefits, fringe benefits, and working with high-tech equipment increased. A smaller percentage of individuals in the 25- to 29-year group felt money for college was important, but a larger percentage felt working with high-tech equipment was important when compared to younger age groups.

TABLE 18

ECONOMIC INFLUENCES ON 1986 RNRS RESPONDENTS BY SEX (IN PERCENT)

	VARIABLE	MALES	FEMALES
*	Money for College	62.8	75.8
	Earning Money	57.5	59.9
*	Skill Training	54.4	62.8
	Money for Vocational Training	33.3	34.2
*	Retirement Benefits	28.9	22.4
	Fringe Benefits	28.6	25.0
**	Work w. High-Tech Equipment	23.8	18.4
	Unemployment	10.6	8.8
	N	2,252	451

Note: ***Significance = .01 level*** *****Significance = .05 level***

Economic influences were most difficult to analyze in terms of racial-ethnic groups. When economic factors were crosstabulated with racial-ethnic groups, all variables showed significant differences at the .01 level with the exception of money for college, retirement benefits, and unemployment. To separate the effect of sex and race, economic factors were stratified by both variables in Table 19.

A higher percentage of black men than white and Hispanic men indicated that earning money was important. A larger proportion of all minority males than white males believed skill training and money for vocational training or business school were important reasons for enlisting. Black and Hispanic men indicated retirement and fringe benefits were of greater concern than did white and other men. Working with high-tech equipment was also significant to a larger percentage of black men.

Only two economic variables were significant by racial-ethnic groups for female recruits in the survey. Fringe benefits and working with high-tech equipment were most important for other and black women and least important for Hispanics. Fringe benefits were significant at the .05 level and working with high-tech equipment was significant at the .01 level.

TABLE 19
ECONOMIC INFLUENCES ON 1986 RNRS RESPONDENTS BY RACIAL-ETHNIC GROUP AND SEX (IN PERCENT)

		MALES			
	VARIABLE	White	Black	Hispanic	Other
	Money for College	62.2	64.4	63.9	66.7
*	Earning Money	55.7	66.3	57.1	45.2
*	Skill Training	51.7	62.8	60.8	59.5
*	Money for Vocational Training	30.9	37.4	46.9	42.3
*	Retirement Benefits	27.9	33.9	33.0	17.4
*	Fringe Benefits	25.9	36.7	39.6	23.9
*	Working w/ High-tech Equipment	21.3	33.9	24.0	23.6
	Unemployment	10.0	11.8	14.4	10.0
	N	1,640	428	102	75

		FEMALES			
	VARIABLE	White	Black	Hispanic	Other
	Money for College	75.9	76.7	64.3	78.6
	Earning Money	62.4	58.5	46.2	50.0
	Skill Training	59.1	67.8	53.8	64.3
	Money for Vocational Training	31.9	36.5	46.2	35.7
	Retirement Benefits	23.6	22.2	7.7	21.4
**	Fringe Benefits	20.8	31.1	8.3	35.7
*	Working w/ High-tech Equipment	13.6	25.0	0.0	21.4
	Unemployment	8.1	9.4	7.7	14.3
	N	240	181	14	14

Note: **Significance = .01 level   **Significance = .05 level*

The importance of money for college decreased with the quality of accessions. High quality accessions who had graduated from high school emphasized money for college more often than did their peers still in high school. The opposite pattern was observed for skill training, fringe benefits, and unemployment. The comparison between economic factors and the quality of recruits is the only instance in which unemployment proved to be a significant influence in the enlistment decision.

E. ADVERTISING INFLUENCES

New recruits were asked how important advertising variables were in their decision to talk to an Army recruiter. Responses ranged from ***does not apply, event did not occur*** to ***I would not have talked to an Army recruiter except for this reason***. The five event response scale used in the survey was, again, dichotomized into two groups. If the response was "does not apply; the event did not occur" or "event occurred but not at all important," it was coded 0. All other responses were coded 1, and the Chi-Square test of independence was used to determine the level of significance for differences.

The only variable in Table 20 showing a significant difference by gender was the information received in the mail after the individual sent a card or called a toll-free number in response to an Army ad (Information from REACT). More men than women (23.3 percent vs. 3.6 percent) said that this variable had influenced them. This is probably attributable to a greater recruiting effort in targeting young men rather than young women.

The exact questions asked in the 1986 ARI Survey concerning advertising factors are given in Appendix G. Crosstabulations for advertising variables by racial-ethnic groups and age are also included in the appendix. The variables listed below were significant when stratified by age at accession:

- Information Posted at School
- Information from REACT
- Non-Solicited Mail
- Recruiter Contact

High schools and, to a lesser degree, colleges and universities are primary means for recruiters to contact market segments with the desired characteristics. Mailing lists for these individuals are readily obtainable from educational institutions, and recruiters are able to communicate with audiences rather than individuals.

Civilian job information, job fairs, and enlisted friends were also significant for differential age groups. Job fairs were most important for individuals 30- to 35-years of age and those 16- to 20-years of age. The percentage of new recruits listing an

TABLE 20
ADVERTISING INFLUENCES ON 1986 RNRS RESPONDENTS BY SEX
(IN PERCENT)

VARIABLE	MALE	FEMALE
Recruiter Contact	38.3	41.5
Army Ad, TV	33.1	34.2
Enlisted Friend	29.2	28.3
Army Ad, Magazine	28.6	30.4
Information at School	28.0	32.5
Job Fair	24.0	21.5
Army Ad, Radio	23.4	23.5
* Information from REACT	23.3	3.6
Non-Solicited Mail	23.2	21.2
Recruiter Aide	15.3	15.0
Civilian Job Information	12.2	11.2
Recruiter, Other Service	7.3	6.8
State Employment Office	4.0	3.4
State Employment Counselor	3.3	2.5
Police Judge Probation Off.	4.0	3.4
N	2,252	451

Note: **Significance level = .01* ***Significance level = .05*

enlisted friend as being important declined substantially with age. Civilian job information stipulating that an individual needed more experience or training was most important for individuals entering between the ages of 21 to 29 years.

Again, an attempt was made to distinguish the differences caused by racial-ethnic group from those caused by gender in Table 21. A higher percentage of all minority men indicated job fairs, recruiters of other services, state employment offices, state employment counselors, and civilian job information influenced them to contact an Army recruiter when compared to white men. Blacks and others were more often influenced by recruiter aides than whites and Hispanics. A larger proportion of black and Hispanic men were also influenced by a law enforcement officer or agency.

TABLE 21
ADVERTISING INFLUENCES ON 1986 RNRS RESPONDENTS BY RACIAL-ETHNIC GROUP AND SEX (IN PERCENT)

		MALES			
	VARIABLE	White	Black	Hispanic	Other
	Recruiter Contact	38.6	38.2	33.0	41.2
	Army Ad, TV	33.8	32.2	23.1	32.9
*	Enlisted Friends	29.6	30.2	20.0	29.4
	Army Ad, Magazine	28.5	29.5	20.9	32.8
	Information at School	27.5	30.6	20.5	30.9
*	Job Fair	22.2	27.8	32.6	34.8
	Army Ad, Radio	24.0	20.9	21.7	25.4
	Information from REACT	29.0	26.0	18.7	25.7
	Non-Solicited Mail	23.4	24.6	14.3	20.6
	Recruiter Aide	8.6	21.9	7.7	35.7
*	Civilian Job Information	10.7	15.7	17.4	20.3
*	Recruiter, Other Service	6.1	9.8	12.9	13.0
**	State Employment Office	3.3	6.3	6.7	4.4
*	State Employment Counselor	2.3	5.7	7.8	5.9
**	Police Judge/Probation Off.	2.6	5.2	5.6	2.9
	N	1,640	428	102	75

		FEMALES			
	VARIABLE	White	Black	Hispanic	Other
	Recruiter Contact	41.5	41.4	46.2	30.8
	Army Ad, TV	32.5	36.7	15.4	38.5
	Enlisted Friends	27.2	29.8	30.8	30.8
	Army Ad, Magazine	29.8	30.1	15.4	50.0
	Information at School	30.3	34.9	30.8	38.5
	Job Fair	17.0	25.8	38.5	28.6
	Army Ad, Radio	27.0	28.4	0.0	0.0
	Information from REACT	22.3	19.8	23.1	23.1
	Non-Solicited Mail	19.6	24.6	15.4	7.7
*	Recruiter Aide	8.6	21.9	7.7	35.7
	Civilian Job Information	9.8	11.9	30.8	7.7
	Recruiter, Other Service	7.3	7.3	0.0	0.0
*	State Employment Office	1.7	4.5	0.0	23.1
	State Employment Counselor	2.1	3.4	0.0	0.0
*	Police Judge/Probation Off.	1.3	1.7	0.0	14.3
	N	240	181	14	14

Note: **Significance level = .01* ***Significance level = .05*

Only three advertising variables were significant for women by racial-ethnic groups. A larger proportion of others and blacks were influenced by recruiter aides. The most noticeable differences were in the large percentages of other women influenced by law enforcement officials and state employment offices.

When comparing advertising variables and the quality of accessions, all variables except enlisted friend and Army magazine ads proved to be significant. Army television ads were significant at the .05 level, and all other variables were significant at the .01 level using the Chi-Square statistic for quality categories. The advertising influences showing some level of significance for quality groups are given in Table 22. The percentages of low quality accessions indicating job fairs, civilian job information, state employment counselors or offices, other service recruiters, and law enforcement officials influenced them to contact an Army recruiter were two to three times as large as the percentages for high quality accessions.

TABLE 22

ADVERTISING INFLUENCES ON 1986 RNRS RESPONDENTS BY QUALITY GROUPS (IN PERCENT)

	VARIABLE	HIGH	INDETER	LOW
*	Recruiter Contact	30.8	45.7	37.7
**	Army Ad, TV	29.0	34.9	34.3
	Enlisted Friend	26.2	30.6	29.9
	Army Ad, Magazine	25.4	29.7	30.1
*	Information at School	20.6	31.8	31.1
*	Job Fair	12.3	21.5	34.9
	Army Ad, Radio	21.8	24.7	24.7
*	Information from REACT	17.1	33.8	25.3
*	Non-Solicited Mail	13.7	28.7	22.2
*	Recruiter Aide	9.0	13.4	22.2
*	Civilian Job Information	8.6	7.3	19.9
*	Recruiter, Other Service	5.7	5.3	10.8
*	State Employment Office	2.2	2.7	6.6
*	State Employment Counselor	1.5	2.3	5.4
*	Police Judge Probation Off.	2.0	2.1	4.9
	N	615	1,106	907

*Note *Significance level = .01 **Significance level = .05*

F. INTRINSIC INFLUENCES

The intrinsic influences analyzed using the 1986 ARI Survey for USAR accessions can be grouped into three categories. The first category of questions focused upon patriotism. New recruits were asked if serving their country, being a soldier, experiencing military life, and family tradition were important factors in their having enlisted in the military. The second category of questions asked individuals about their objectives for self-development, and the third category asked questions about their social values with regard to both men and women serving in the military.

The results in Table 23 show that men and women rank ordered the importance of intrinsic influences in the same way. When asked about patriotism, a larger proportion of the men than of the women believed these variables were important. The only patriotism measure showing a significant difference by gender at the .01 level was serving the country. More men (56.6 percent) than women (40.6 percent) indicated this variable was relevant in their decision to enlist.

TABLE 23
INTRINSIC INFLUENCES ON 1986 RNRS RESPONDENTS BY SEX
(IN PERCENT)

	VARIABLE	MALE	FEMALE
	PATRIOTISM		
*	To Serve Country	56.6	40.6
	To be a Soldier	32.3	27.9
	To Experience Military Life	22.9	21.0
	Family Tradition	12.6	5.6
	SELF-DEVELOPMENT		
	To Better Self	66.8	71.6
**	To be Responsible Person	52.1	57.3
	Physical Training	53.0	53.0
*	To be Self-Reliant	46.8	56.9
*	To Prove I Can Make It	39.5	46.6
	Leadership Training	37.9	37.2
	To Decide Life Plans	18.7	18.2
	SOCIAL VALUES		
*	Men & Women Treated Equally	6.6	16.6
*	Men & Women Should Experience Military Service	22.2	43.9
	N	2,252	451

Note: **Significance level = .01* ***Significance level = .05*

On the other hand, higher percentages of women than of men were concerned with self-development and factors pertaining to social equity. Overall, more women thought the USAR would assist them in becoming a more responsible and self-reliant individual who could prove she could make it in life. Of the female respondents, 43.9 percent believed that it was important for both men and women to experience military life compared to 22.2 percent of the male respondents. In addition, more women (16.6 percent) than men (6.6 percent) believed that it was important for men and women to be treated equally.

Table 24 shows that most intrinsic influences differed significantly for male recruits when stratified by racial-ethnic groups. A larger percentage of all minority

TABLE 24
INTRINSIC INFLUENCES ON 1986 RNRS RESPONDENTS
BY RACIAL-ETHNIC GROUP AND SEX (IN PERCENT)

		MALES			
	VARIABLE	White	Black	Hispanic	Other
	PATRIOTISM				
*	To Serve Country	59.3	47.0	57.1	51.4
	To be a Soldier	31.7	31.9	40.2	38.0
*	To Experience Military Life	19.5	33.2	34.7	25.0
	Family Tradition	12.6	14.1	9.3	7.1
	SELF-DEVELOPMENT				
*	To Better Self	64.7	74.1	71.7	64.8
*	To be Responsible Person	49.0	61.9	60.0	52.8
**	Physical Training	51.3	58.7	53.1	61.1
*	To be Self-Reliant	43.8	59.1	50.5	40.6
	To Prove I Can Make It	37.9	43.3	48.5	40.8
*	Leadership Training	35.9	46.7	37.5	37.1
*	To Decide Life Plans	17.0	23.6	22.7	23.9
	SOCIAL VALUES				
*	Men & Women Treated Equally	5.4	10.9	7.4	7.0
*	Men & Women Should Experience Military Service	18.4	35.5	30.2	19.7
	N	1,640	428	102	75

TABLE 24 - (Cont'd)
INTRINSIC INFLUENCES ON 1986 RNRS RESPONDENTS
BY RACIAL-ETHNIC GROUP AND SEX (IN PERCENT)

	FEMALES			
VARIABLE	White	Black	Hispanic	Other
PATRIOTISM				
To Serve Country	44.5	33.3	50.0	50.0
To be a Soldier	26.0	30.4	7.7	35.7
To Experience Military Life	17.2	26.4	7.7	21.4
Family Tradition	6.8	5.0	0.0	0.0
SELF-DEVELOPMENT				
To Better Self	72.6	69.6	69.2	78.6
To be Responsible Person	52.6	62.2	69.2	57.1
Physical Training	54.2	50.6	30.8	78.6
To be Self-Reliant	54.9	60.5	38.5	57.1
To Prove I Can Make It	43.6	51.4	30.8	42.9
Leadership Training	33.9	41.6	23.1	42.9
* To Decide Life Plans	15.7	19.0	15.4	50.0
SOCIAL VALUES				
Men & Women Treated Equally	16.0	17.1	7.7	28.6
* Men & Women Should Experience Military Service	38.8	51.9	7.7	53.8
N	240	181	14	14

Note: **Significance level = .01* ***Significance level = .05*

men indicated it was important to experience military life when compared to white men. On the other hand, a larger percentage of white men indicated the opportunity to serve the country had influenced their decision to enlist.

Overall, minority male recruits were more strongly influenced by variables pertinent to self-development and social equity. A larger percentage of black and Hispanic men believed enlisting in the USAR would help to better themselves and to make them more responsible and self-reliant. A large proportion of black men also believed leadership training was important in their self-development. A substantially larger percentage of other men and black men identified physical training as a factor in the enlistment decision. Generally, the percentage of positive responses for black and Hispanic men were similar, and the percentage of positive responses for other men more closely corresponded to those of white men.

There were less significant differences among women from different racial-ethnic groups. Only two intrinsic influences were significant at the .01 or .05 level. Half of the women in the other racial-ethnic group indicated enlisting in the USAR would assist them in deciding their life plans. More than half of the other and black women stipulate it was important for both men and women to experience military life.

Only two intrinsic influences yielded a significant difference for the four age groups. The percentage of individuals indicating their enlisting in the military would help them to be a more responsible person declined with age from the youngest to the oldest market segments. This variable was significant at the .05 level using the Chi-Square statistic. The percentage of accessions indicating that it was important for men and women to be treated equally increased from 7.7 percent in the 16- to 20-year age group to 25.9 percent in the 30- to 35-year age group and was significant at the .01 level.

Overall, the importance of intrinsic influences increased as the quality of accessions decreased. Low quality accessions were most likely to be affected by intrinsic variables and high quality accessions were the least likely to be affected.The percentage of positive responses from the indeterminant group were generally between the other two groups.

G. ARMY RECRUITERS AND COUNSELORS

The 1986 ARI Survey asked accessions how satisfied they were with the information that their Army recruiter and guidance counselor had given them about the kind of job they would be doing in the military. The responses ranged from ***I do not know what job I signed up for*** to ***very dissatisfied.*** For this analysis, the six responses given in the survey were dichotomized into two groups: satisfied and dissatisfied before applying the Chi-Square test of independence. Only repsonses of "very satisfied" or "somewhat satisfied" were coded as being positive.

There were no significant differences for any subpopulation concerning the information received from Army recruiters. However, there were significant differences by racial-ethnic group and quality concerning the information received from Army guidance counselors at the reception stations. Blacks and other recruits tended to be more satisfied with the information received from counselors. This was also true for the low quality group, and to a lesser degree, for accessions in the indeterminant group. Of the low quality accessions, 64.5 percent were satisfied with the information about their military job compared to 54.1 percent of the high quality accessions. The results on information received from Army recruiters and counselors are summarized for quality groups, race, age, and sex in Table 62 of Appendix I.

H. INFLUENCES UNIQUE TO THE USAR

Unlike active duty personnel, reservists stay at home and are employed only part-time by the military. Noting these characteristics of service unique to the reserve component, the 1986 ARI Survey asked the new recruits if the following factors were important in their decision to enlist in the USAR:

- Serving America while staying in their hometown;
- Serving in the military part-time while working on a civilian job;
- Serving in their own community;
- Experiencing interesting and exciting weekends; and
- Participating in a time-honored American tradition.

The results for men and women in Table 25 were similar to the results obtained on intrinsic influences dealing with patriotism. Overall, men were more likely to be

TABLE 25

RESERVE FACTORS INFLUENCING 1986 RNRS RESPONDENTS BY SEX (IN PERCENT)

	VARIABLE	MALE	FEMALE
*	Serving America at Home	38.0	25.5
	Part-time Military Employment and Civilian Job	53.8	54.6
*	Serving in own Community	25.3	15.7
*	Experiencing Exciting Weekends	31.5	21.4
*	Honoring an American Tradition	34.9	20.9
	N	2,252	451

Note: **Significance level = .01   **Significance level = .05* influenced by all these variables than were women. All variables were significant with the exception of the economic factor pertaining to part-time military employment and civilian employment.

All results for age, racial-ethnic group, and quality group are given in Table 26. Only the question concerning employment was significant with regard to age.

TABLE 26
RESERVE FACTORS INFLUENCING 1986 RNRS RESPONDENTS
BY AGE, RACE, AND QUALITY (IN PERCENT)

	VARIABLE/AGE (Yrs)	16-20	21-24	25-29	30-35
	Serving America at Home	35.7	34.3	48.1	34.6
*	Part-time Military Employment and Civilian Job	52.4	62.0	69.0	65.4
	Serving in own Community	23.2	25.1	29.3	34.6
	Experiencing Exciting Weekends	29.7	27.7	41.5	19.2
	Honoring an American Tradition	32.4	32.9	37.3	23.1
	N	2,336	252	85	29
	VARIABLE/RACE	White	Black	Hispanic	Other
*	Serving America at Home	38.1	27.9	35.5	45.2
	Part-time Military Employment and Civilian Job	53.6	52.9	61.3	59.3
**	Serving in own Community	24.3	19.9	31.5	27.1
	Experiencing Exciting Weekends	30.2	28.6	31.5	25.9
*	Honoring an American Tradition	35.4	24.2	32.1	27.9
	N	1,880	609	116	89
	VARIABLE/QUALITY	HIGH	INDETER	LOW	
	Serving America at Home	35.4	34.4	38.5	
*	Part-time Military Employment and Civilian Job	55.4	48.5	60.1	
*	Serving in own Community	19.6	20.6	30.6	
*	Experiencing Exciting Weekends	21.9	29.4	35.3	
*	Honoring an American Tradition	25.4	32.9	36.2	
	N	615	1,106	907	

*Note: *Significance level = .01   **Significance level = .05*

Individuals entering the 25- to 29-year group (69.0 percent) indicated part-time employment in the USAR while maintaining a civilian job was most important to them. They were followed by individuals entering from the 30- to 35-year group at 65.4 percent, and those entering from the 16- to 20-year group were the least likely influenced by employment with 52.4 percent giving a positive response.

Three questions showed significant differences by racial-ethnic groups. Blacks were the least likely to be influenced by staying at home, serving the community, and tradition when compared to other racial-ethnic groups. Others were most likely to indicate that serving America while staying at home was important to them. Hispanics were more often influenced by the opportunity to serve their own community.

When influences unique to the USAR were stratified by the quality of accessions, all variables except for serving the country at home were significant at the .01 level. The indeterminant group was least likely to be affected by the employment variable. Overall, low quality accessions were most likely to be influenced by this set of variables, and the high quality group of accessions were the least likely to be affected.

VI. SUMMARY

First, the analyses in this study examined the socioeconomic profiles for the USAR enlisted membership. Personal and military background variables were used to identify subpopulation differences based upon sex and entry age to determine likely effects of increasing the participation of women and older accessions as a means for expanding the reserve manpower supply. Qualitative effects from the increased participation of women and older age accessions were emphasized rather than the quantitative effects.

Second, the analyses examined the enlistment motivations of USAR accessions for the purpose of identifying ways to target specific market segments. Five areas of influence were analyzed: economic rewards, military advertising, intrinsic rewards, Army recruiters and guidance counselors, and factors unique to the reserves. This chapter of the study briefly summarizes important research findings and discusses policy implications of the results requiring further investigation.

A. RESULTS OF ANALYSIS: USAR MEMBERSHIP

The analysis on the demographic composition of the USAR membership revealed significant differences in the profiles of enlisted men and women in terms of their education level and aptitude test scores. Women enlisting in the USAR were, on average, six months older than their male counterparts. The average educational attainment of enlisted women exceeded that of enlisted men by ten months, and women scored an average of 2.5 percentile points higher than did men on the Armed Forces Qualification Test (AFQT). It is important to note that only the cumulative AFQT scores of the enlisted membership were analyzed to determine the effects of sex. Analyses of the AFQT composite scores may reveal more subtle differences in a comparison of aptitude between men and women.

In a comparison of the non-prior service membership and the prior service membership, differences in the education level and aptitude of men and women produced mixed results when stratified by entry age. Women had a higher education level than did men in both the prior service and non-prior service membership. However, the percentage of women in AFQT category I-IIIA was lower than the percentage of men for non-prior service personnel. This may be attributable to a larger portion of the non-prior service women being in the youngest market segment between 16 and 20 years of age. Previous research has shown that scores on test of mental aptitude are related to both age and educational attainment.

In the prior service membership, the higher education level of women was accompanied by a larger percentage of the female membership being in AFQT category I-IIIA. The education level and aptitude test scores of both men and women increased substantially with age; however, the resulting increases were somewhat larger for women than for men.

One of the most noticeable differences between men and women became evident when the prior service membership was stratified by sex and racial-ethnic group. A number of research studies (previously conducted) have indicated that the aptitude test scores of minority members (blacks and Hispanics) are substantially lower than those of white members. These studies, for the most part, have concentrated upon young men in the primary military market of 17- to 21-year olds. This pattern was observed to be true for non-prior service men and women and for prior service men. However, in the prior service membership, the aptitude category of men and women differed dramatically within a given racial-ethnic group as well as among different racial-ethnic groups. Although the large disparities in aptitude test scores persisted for men of different racial-ethnic groups, the test scores of women showed a marked convergence.

Moreover, it should be noted that the education level and aptitude test scores of women exceeded those of men although a larger percentage of the total female membership was comprised of minority females. This suggests that the effects of gender may overshadow subpopulation differences created by race in the female membership. Since females tend to enter the military at an older age and age is positively related to aptitude, no conclusions were drawn about the magnitude or net effect of subpopulation differences created by sex and entry age.

The findings of this study indicate three courses of action that the USAR could pursue in raising the quality of its enlisted force. Assuming there are no major changes in the selection and entry criteria of military personnel or the conditions of the current recruiting market, the USAR could improve force quality by:

- Increasing female participation;
- Recruiting more personnel from the older market segments; or
- Increasing the participation of women and older age accessions, simultaneously.

B. RESULTS OF ANALYSIS: ENLISTMENT MOTIVATIONS

The results obtained on enlistment motivations from the 1986 ARI Survey were thought to be affected by seasonal trends associated with the survey's reporting period. A comparison of the demographic composition of survey respondents with summary statistics on all FY86 non-prior service gains revealed an extremely high proportion of men and women entering the service from the 16- to 20-year age group. As a result, high school students and personnel in the indeterminant quality group may be overrepresented in the survey sample as compared to their proportions of annual accessions.

An analysis of the differences between men and women indicated that women were influenced more strongly by economic variables pertaining to human capital investments and intrinsic rewards pertaining to self-development and social equality. A higher percentage of women emphasized the need to obtain money for college and skill training. On the other hand, men more often emphasized retirement benefits and working with high-tech equipment. Generally, men were more likely to be affected by patriotism and tradition while women more often expressed the desire to be a responsible, self-reliant individual. Furthermore, women more often indicated that egalitarian principles had influenced their decision to enlist.

The only advertising variable of significance in the recruitment of men and women was information received in the mail as a result of responding to an Army ad. No differences were noted by gender in the satisfaction of accessions with the information they received about their prospective military jobs.

In the analysis of characteristics unique to the reserves, men, once again, were more strongly influenced by patriotism and tradition than were women. Serving the country in one's own hometown and community more often appealed to male accessions. In addition, a larger percentage of men also indicated that the expectation of interesting and exciting weekends had influenced their decision to enlist in the USAR.

Military benefits increased in importance with age from the youngest to the oldest market segment. Older accessions in the survey frequently cited retirement benefits and fringe benefits as having influenced their decision to enlist. These individuals also indicated a greater desire to work with high-tech equipment. Money for college, however, decreased in importance with age. The most noticeable decrease was for personnel entering the USAR between 25- to 29-years of age.

Much of the military's advertising focused upon high school and college students; therefore, the effect of these variables was greatest for the 16- to 20-year age group. The influence of enlisted friends decreased with age. This was a predictable outcome in accordance with Schein's psychological development process that indicates younger individuals more often act based upon perceptions and external information sources [Ref. 18 pp. 1-5].

The influence of self-development variables decreased with age while the influence of egalitarian principles increased for both men and women. Information received from Army recruiters and guidance counselors revealed no significant differences for the four differential age groups. In regard to the features unique to the reserve force, part-time employment in the military while maintaining a civilian job became increasingly important for the two older market segments.

Motivational influences were stratified simultaneously by sex and racial-ethnic group to determine the net effect of the two variables. Racial-ethnic differences were more likely to be significant for men than for women. Overall, minority men (especially blacks and Hispanics) were more likely to be influenced by economic variables when compared to white men. Fringe benefits and working with high-tech equipment were the only economic influences that were significant for women of different racial-ethnic backgrounds.

In analyzing characteristics of the USAR, black men and women were less likely than other racial-ethnic groups to be influenced by patriotic and traditional variables, but they were more likely to be satisfied with job information from Army recruiters and counselors.

In addition to gender and age differences, motivational variables were also examined by the quality of accessions to see if there were variables particularly effective in influencing the decisions of high quality personnel. High quality recruits were motivated more by economic variables pertaining to human capital investments (i.e., money for college and skill training), while low quality accessions were motivated more by fringe benefits and by the threat of unemployment. Moreover, low quality recruits were more likely to indicate patriotism and tradition as having influenced their decision to enlist and were more often satisfied with the information received from guidance counselors. The most distinguishing factor seemed to be the influence of unemployment on the low quality group's decision to enlist.

C. CONCLUSIONS

Since the inception of the all recruited force, it has too often been assumed that the U.S. Army Reserve would be faced with personnel challenges parallel to those in the active Army. Implementation of the Total Force concept increased the mission responsibilities and projected growth rate of the reserve component. A greater dependency of the active force on its reserve component dictates the need for the USAR to achieve and maintain a level of personnel readiness comparable to that of the Regular Army.

A decline in the primary military market of male youths and technological innovations in defense systems have presented the active component with difficulties in recruiting a sufficient number of high quality enlistees. Increased responsibilities, growth rates, and recruiting costs in addition to a lack of research on factors unique to the reserves have compounded these difficulties for the USAR. As a result, it is imperative for the reserve component to consider all alternatives for the expansion of its enlistment supply of high quality personnel.

Quantity and quality are two measures of success the Department of the Army applies to the recruiting efforts of its subordinate components. Previous studies have indicated there is probably a sufficient amount of interest on the part of women and older age individuals for the declining military male youth population to be satisfactorily augmented under the all-volunteer concept [Ref. 8, 16]. The findings of this study indicate that the increased participation of women and older age accessions would not only aid the military in achieving its quantitative objectives, but would also raise the quality of the enlisted force in the USAR.

There are also additional benefits to be derived from the increased participation of these two subpopulations. First, the reserve component would not be competing with the Army National Guard and other active components for a limited supply of male youths between the ages of 17 and 21 years. The diversion of recruiting resources away from the primary military market towards larger alternative market segments could possibly reduce the costs associated with recruiting high quality enlistees.

Based upon its mission of combat support versus combat, the USAR could use a larger female membership without violating restrictions placed upon women serving in combat specialties or positions where direct combat is highly probable. Unlike the active components, the mix of male and female members does not present as large of a problem with the career assignments and rotation of USAR enlisted personnel.

Furthermore, considerations of social equity favor the increased participation of women and older age accessions. Many argue that women should be granted the same economic opportunities granted men and that the lack of participation of women in the Armed Forces, to any large extent, reinforces the idea of their being "second class" citizens. Increasing the participation of women and older market segments in the USAR is not prescribed as a cure for these social concerns; however, such actions would be a positive step in promoting social equality. Ultimately, the USAR and other military components should be able to justify the selection of personnel in terms of individual ability and the security needs of the country.

A possible cost of increasing the participation of women focuses upon the high attrition rate of the USAR female membership. High attrition rates increase training costs and decrease personnel readiness. On the other hand, high quality enlistees reduce attrition and accession requirements. As a result, training costs are lowered and readiness is increased in terms of individual productivity and the reliability of systems involving the simultaneous interaction of man and machine.

It is beyond the scope of this study to determine the net effect of these two factors. However, it has been suggested that the attrition rate of women may be diminished with more emphasis being placed on egalitarian principles. Affirmative action in the civilian sectors has made the quit rates of female employees more comparable to those of male employees, and the active components, with the exception of the Marine Corps, have been extremely successful in reducing the attrition of women over the past five years.

There are also costs associated with the increased participation of older age accessions. Similar to the attrition problem with women, the evidence on the attrition of older age accessions in the USAR is even more inconclusive. Previous studies have, for the most part, collapsed the total membership into two age categories: 18- to 20-years old and 21 years or older. However, there are some elements within the Recruiting Command and USAR who believe that older, less mobile, market segments would provide a more stable reserve force. Older individuals are more likely to have job and family ties with a specific geographical location. Furthermore, they are less likely to have problems with the turbulence of normal civilian life (i.e., entering the primary labor force for the first time and/or setting up a new household).

A disadvantage to enlisting older individuals in the active components is the increased medical and personnel costs associated with married service members. A review of the literature revealed no research on the determination of these costs in the reserve components. Since the benefits for family members of reservists are extremely limited compared to the family benefits of active duty personnel, it is doubtful these costs are of as great a concern to the USAR.

Perhaps, the greatest concern with older accessions in the USAR would be the costs associated with targeting older market segments. The results of this study revealed that mass media advertising influenced an equal or larger percentage of the two older age groups. Most mass media ads, however, have focused upon education, skill training, patriotism, adventure, and youth. The focus of these ad campaigns could be altered to include military benefits and economic opportunities of interest to the older individuals.

As previously indicated, recruiters have concentrated non-solicited correspondence and personal contact upon high school and college students. There are other federal and state agencies besides educational institutions which could provide the information required to reach older individuals at little or no cost to the military.

Since the military has historically targeted male youths, many older individuals who desire to participate may be discouraged by their age. Moreover, such strong emphasis on youth may cause enlisted service members and referral agencies to be hesitant in suggesting military service as an employment source to older friends or clients. Therefore, it appears the USAR could benefit more from older age accessions by deemphasizing youth to some extent. Older accessions did, however, indicate that the physical demands of the military had positively influenced their decision to enlist as much as it had the decision of the youngest market segment.

Along with the deemphasis on youth, there should also be a concerted effort to distinguish the USAR from the Regular Army in mass advertising. Benefits derived from the increased participation of women and older age accessions are not the same for the two components. Some of the benefits applicable to the USAR may also apply to the Army National Guard in pursuing its recruiting objectives. Although it is probable that the ARNG would benefit from older accessions, caution must exercised in applying research results for the USAR to the Guard when the increased participation of women is concerned. Unlike the USAR, the ARNG's primary mission is to augment combat components and not combat support components.

Before selecting an alternative to increase the quantity and quality of enlisted reservists, more research is needed to determine what percentage of the USAR could be composed of women without violating current assignment restrictions during mobilization. The attrition rates for differential age groups should also be determined. Furthermore, the marginal costs and benefits derived from the increased participation of women and older age accessions must be estimated to determine the most cost-efficient mixture of personnel.

This study, like most others, only examined the socioeconomic profiles and enlistment motivations of individuals who decided to enlist in the USAR. More insights may be gained by examining the characteristics of individuals who did not join. Analyses of enlistment motivations indicate factors that attract individuals to the military; however, such analyses do not indicate what characteristics have a negative impact upon those who decide not to enlist.

Further research dedicated to examining the costs and benefits of each alternative will give the USAR a more definitive statement about what course of action should be pursued in expanding the enlistment supply. A larger supply of high quality individuals will assist the USAR in achieving the level of personnel readiness required to accomplish greater mission responsibilities at a lower cost.

APPENDIX A
DATA BASES FOR ECONOMETRIC VARIABLES

MILITARY AND CIVILIAN

DATA BASES FOR ECONOMETRIC VARIABLES

DATA SOURCE	ITEM
USAREC RSID Data Base	Number of USAR Recruiters
	Number of USA Recruiters
USAREC UNITSTR Data Base	Losses
USAREC TAP88n Data File	Gains
USAREC MILINS Data Base	Military Installations Count
BLS Laus File	Market Unemployment Rate
BLS ES-202 File	Wages
CENSUS Migration File	1980 Population
	1985 Population
USAREC T88MAMEM Data File	USAR Members
	Guard Members
	Total Reserve Component Members
	Adjusted Authorizations
Data Available from DMDC	Population Change 1970-1980
	Blue Collar Occupations
	White Collar Occupations
	Unemployment for White & Black Males
	Available Males in Primary Market (17 to 21 years of age)
	Available Males in Secondary Market (22 to 29 years of age)
	Total Number of Males Available for Military Service
	Total Number of Males and Females Available for Military Service
	Average Family Income
	Average Family Size
	Median Home Value
	Median Home Rent

APPENDIX B
VALUE LABELS

CENSUS REGION
EDUCATION LEVEL
AFQT CATEGORY

CENSUS REGION VALUE LABELS

REGION	STATES & TERRITORIES
New England	ME, NH, VT, MA, RI, CT
Middle Atlantic	NY, NJ, PA
South Atlantic	DE, MD, DC, VA, WV, NC, SC, GA, FL
East North Central	MI, OH, IN, WI, IL
East South Central	KY, TN, AL, MS
West North Central	MN, IA, MO, ND, SD, NE, KS
West South Central	AR, LA, OK, TX
Mountain	MT, WY, CO, NM, ID, UT, AZ, NV
Pacific	WA, OR, CA, AK, HI
Territories	Guam, Puerto Rico, Canal Zone American Samoa, Virgin Islands

EDUCATION VALUE LABELS

Non-HSG: Individuals completing 1 thru 11 years of formal education.

Non-HSDG: Individuals who did not receive a high school diploma. These individuals may have completed 1 thru 11 years of formal education or be the recipient of a high school equivalency certificate.

In HS: Individuals currently attending high school.

HS Cert: Recipients of high school equivalency certificates to include the GED.

HSDG: Recipients of a high school diploma.

Some College: Individuals completing 1 thru 3 years of college.

BA/BS+: Recipients of a bachelor's, master's, doctorate, or other professional degree.

AFQT CATEGORY VALUE LABELS

AFQT CATEGORY	AFQT Percentile Rank	ARMY Standard Score[a]	IQ[b]
I	93 - 99	130	122
II	65 - 92	108	106
IIIA	50 - 64	99	100
IIIB	31 - 49	90	93
IV[c]	10 - 30	74	81
V[d]	1 - 9	54	66

Note a: Mean = 100, S.D. = 20.

Note b: Weschler Adult Intelligence Scale Standard: Score Mean = 100 and S.D. = 15.

Note c: AFQT categories IVA thru IVC were combined.

Note d: Personnel in AFQT category V are not eligible for military service.

APPENDIX C
USAR ENLISTED MEMBERSHIP
MARCH 1987

MALE SAMPLE SIZE: 40,994

FEMALE POPULATION: 43,571

TABLE 27

ENTRY AGE DISTRIBUTION OF USAR MEMBERSHIP BY RACE AND SEX (IN PERCENT)

MALES

AGE	WHITE	BLACK	HISPANIC	OTHER
17-20 yrs.	60.1	51.4	47.5	60.0
21-24 yrs.	25.3	29.6	30.9	23.1
25-29 yrs.	9.6	13.3	14.5	11.2
30-34 yrs.	5.1	5.6	7.1	5.8
N	22,309	8,921	2,057	1,844

FEMALES

AGE	WHITE	BLACK	HISPANIC	OTHER
17-20 yrs.	60.3	55.2	56.6	57.7
21-24 yrs.	21.4	24.2	22.8	22.7
25-29 yrs.	11.6	13.5	13.0	11.2
30-34 yrs.	6.7	7.0	7.5	8.3
N	14,137	12,474	1,351	660

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 28

EDUCATION LEVEL DISTRIBUTION OF USAR MEMBERSHIP BY RACE AND SEX (IN PERCENT)

MALES

EDUCATION	WHITE	BLACK	HISPANIC	OTHER
Non-HSG	9.4	7.8	8.4	9.5
In HS	7.3	3.9	3.8	7.3
HS Cert	8.2	7.2	8.1	6.3
HSDG	56.7	66.1	59.0	62.7
Some College	9.5	9.2	12.3	8.2
BA/BS+	8.8	5.8	8.5	6.0
N	26,075	10,109	2,410	1,202

FEMALES

EDUCATION	WHITE	BLACK	HISPANIC	OTHER
Non-HSG	4.3	2.8	4.4	4.8
In HS	8.4	5.4	6.4	8.9
HS Cert	5.8	4.7	5.6	5.3
HSDG	65.0	69.2	61.9	62.5
Some College	9.7	10.4	12.3	9.6
BA/BS+	6.9	7.6	9.5	8.9
N	21,136	18,230	1,800	1,084

Note 1: Column percentage may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 29

AFQT CATEGORY DISTRIBUTION OF USAR MEMBERSHIP BY RACE AND SEX (IN PERCENT)

MALES

AFQT CATEGORY	WHITE	BLACK	HISPANIC	OTHER
I	11.8	6.4	4.7	6.3
II	39.0	13.1	14.3	25.3
III-A	21.6	17.2	19.9	21.0
III-B	20.6	38.0	40.1	28.1
IV	7.0	25.3	20.9	19.4
N	23,913	8,978	2,122	1,087

FEMALES

AFQT CATEGORY	WHITE	BLACK	HISPANIC	OTHER
I	13.7	5.8	4.6	7.5
II	42.1	19.9	18.3	28.0
III-A	21.9	24.2	23.1	25.8
III-B	20.7	44.1	47.2	34.5
IV	1.7	6.0	6.8	4.2
N	19,344	16,830	1,670	976

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 30

MARITAL STATUS DISTRIBUTION OF USAR MEMBERSHIP BY RACE AND SEX (IN PERCENT)

MALES

MARITAL STATUS	WHITE	BLACK	HISPANIC	OTHER
Single, no depend	51.9	50.6	41.3	63.6
Single, w/depend	3.9	8.8	5.3	2.3
Married, no depend	1.1	1.3	1.0	1.1
Married, w/depend	43.1	39.3	52.4	33.0
N	26,010	10,155	2,408	1,209

FEMALES

MARITAL STATUS	WHITE	BLACK	HISPANIC	OTHER
Single, no depend	65.6	59.3	62.5	65.9
Single, w/depend	8.0	16.7	12.1	8.8
Married, no depend	4.2	2.9	2.7	3.4
Married, w/depend	22.2	21.1	22.7	21.9
N	15,402	13,291	1,435	730

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 31

CENSUS REGION DISTRIBUTION OF USAR MEMBERSHIP BY RACE AND SEX (IN PERCENT)

MALES

CENSUS REGION	WHITE	BLACK	HISPANIC	OTHER
New England	7.0	1.8	1.6	2.9
Middle Atlantic	17.2	15.3	11.8	12.0
South Atlantic	13.0	30.2	4.1	5.3
East North Central	19.5	15.6	4.8	8.0
East South Central	6.6	13.1	0.7	0.9
West North Central	12.6	3.6	1.4	4.5
West South Central	9.4	13.6	19.8	7.6
Mountain	5.2	1.1	6.5	4.3
Pacific	9.3	5.8	12.5	46.0
Territories	0.2	0.0	36.8	8.4
N	26,418	10,275	2,440	1,270

FEMALES

CENSUS REGION	WHITE	BLACK	HISPANIC	OTHER
New England	7.1	2.1	2.1	3.6
Middle Atlantic	16.6	19.1	16.9	16.4
South Atlantic	12.5	28.0	3.4	9.9
East North Central	18.6	15.9	4.5	8.5
East South Central	4.7	12.9	0.4	2.1
West North Central	14.7	4.7	1.3	7.9
West South Central	9.2	11.4	24.8	10.5
Mountain	5.8	0.8	5.8	7.0
Pacific	10.8	5.2	12.8	30.9
Territories	0.1	0.0	28.0	3.1
N	15,685	13,445	1,459	457

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 32

EDUCATION LEVEL DISTRIBUTION OF USAR MEMBERSHIP BY ENTRY AGE AND SEX (IN PERCENT)

MALES

EDUCATION	17-20	21-24	25-29	30-34
Non-HSG	12.8	4.6	4.3	2.9
In HS	11.2	0.1	0.1	0.1
HS Cert	7.4	7.9	8.1	8.2
HSDG	61.1	60.1	57.0	50.4
Some College	5.0	14.7	15.3	17.8
BA BS+	2.5	12.5	15.3	20.7
N	19,587	9,077	3,694	1,825

FEMALES

EDUCATION	17-20	21-24	25-29	30-34
Non-HSG	6.2	1.1	0.6	0.3
In HS	13.3	0.3	0.4	0.4
HS Cert	4.5	6.0	5.8	6.2
HSDG	70.0	70.1	58.5	53.7
Some College	4.6	13.5	16.7	19.6
BA BS+	1.5	9.1	17.9	19.9
N	16,501	6,444	3,550	1,968

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 33

AFQT CATEGORY DISTRIBUTION OF MEMBERSHIP BY ENTRY AGE AND SEX (IN PERCENT)

MALES

AFQT CATEGORY	17-20	21-24	25-29	30-34
I	8.7	11.8	11.0	11.3
II	28.8	30.6	31.2	37.1
III-A	20.6	19.0	19.8	21.9
III-B	28.5	24.7	25.8	20.9
IV	13.4	14.0	12.1	8.8
N	18,472	8,076	3,243	1,633

FEMALES

AFQT CATEGORY	17-20	21-24	25-29	30-34
I	7.2	10.7	11.2	12.3
II	26.5	30.5	36.1	41.1
III-A	22.0	21.8	23.9	25.4
III-B	40.1	32.5	25.8	19.5
IV	4.2	4.6	3.0	1.8
N	15,783	5,812	3,235	1,861

Note 1: Colunm percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 34

MARITAL STATUS DISTRIBUTION OF FY86 USAR MEMBERSHIP BY ENTRY AGE AND SEX (IN PERCENT)

MALES

MARITAL STATUS	17-20	21-24	25-29	30-34
Single, no depend	70.9	35.6	24.2	13.5
Single, w/depend	3.4	6.8	7.7	9.3
Married, no depend	0.9	1.2	1.2	1.3
Married, w/depend	24.8	56.4	66.9	75.9
N	19,584	9,089	3,699	1,814

FEMALES

MARITAL STATUS	17-20	21-24	15-29	30-34
Single, no depend	74.8	54.1	41.4	36.5
Single, w/depend	8.2	14.6	19.0	22.6
Married, no depend	3.2	4.4	3.5	3.3
Married, w/depend	13.8	26.9	36.1	37.6
N	16,491	6,412	3,511	1,913

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 35

CENSUS REGION DISTRIBUTION OF USAR MEMBERSHIP BY ENTRY AGE AND SEX (IN PERCENT)

MALES

CENSUS REGION	17-20	21-24	25-29	30-34
New England	5.9	4.5	4.4	4.4
Middle Atlantic	16.4	16.0	15.7	16.0
South Atlantic	15.5	18.7	18.1	16.4
East North Central	18.2	17.3	16.2	16.9
East South Central	8.0	8.5	8.5	6.6
West North Central	9.9	8.1	7.7	8.8
West South Central	10.7	10.9	11.7	10.8
Mountain	4.3	3.9	4.0	3.3
Pacific	9.2	9.0	9.8	12.2
Territories	1.8	3.2	4.0	4.7
N	19,693	9,171	3,745	1,847

FEMALES

CENSUS REGION	17-20	21-24	25-29	30-34
New England	4.9	4.1	4.0	3.9
Middle Atlantic	17.8	18.0	17.9	18.5
South Atlantic	17.6	19.2	20.8	19.6
East North Central	17.5	16.6	15.6	15.6
East South Central	8.4	8.4	7.3	6.3
West North Central	10.1	8.2	9.2	8.9
West South Central	10.7	11.6	10.5	9.2
Mountain	3.5	3.5	3.6	4.6
Pacific	8.4	8.4	9.0	11.9
Territories	1.1	1.9	2.1	1.5
N	16,613	6,525	3,583	1,988

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

APPENDIX D

USAR NON-PRIOR SERVICE ENLISTED MEMBERSHIP

MARCH 1987

MALE SAMPLE SIZE: 19,841

FEMALE POPULATION: 21,220

TABLE 36

ENTRY AGE DISTRIBUTION OF USAR MEMBERSHIP BY RACE AND SEX (IN PERCENT)

NON-PRIOR SERVICE MALES

AGE	WHITE	BLACK	HISPANIC	OTHER
17-20 yrs.	76.7	71.0	66.5	74.7
21-24 yrs.	16.5	19.9	23.3	14.9
25-29 yrs.	5.2	6.7	7.4	7.1
30-34 yrs.	1.6	2.3	2.8	3.3
N	12,136	4,193	950	692

NON-PRIOR SERVICE FEMALES

AGE	WHITE	BLACK	HISPANIC	OTHER
17-20 yrs.	68.5	63.6	64.4	63.9
21-24 yrs.	19.5	21.8	20.3	21.8
25-29 yrs.	8.0	9.7	10.5	8.8
30-34 yrs.	4.0	4.9	4.8	5.5
N	10,000	8,387	945	487

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 37

EDUCATION LEVEL DISTRIBUTION OF USAR MEMBERSHIP BY RACE AND SEX (IN PERCENT)

NON-PRIOR SERVICE MALES

EDUCATION	WHITE	BLACK	HISPANIC	OTHER
Non-HSDG	13.6	8.2	9.8	12.1
In HS	13.8	8.4	8.3	11.7
HS Cert	7.1	6.7	7.9	5.1
HSDG	59.4	70.9	65.7	64.1
Some College	3.2	3.1	4.2	3.8
BA/BS+	2.9	2.7	4.1	3.1
N	13,198	4,476	1,037	733

NON-PRIOR SERVICE FEMALES

EDUCATION	WHITE	BLACK	HISPANIC	OTHER
Non-HSDG	5.8	3.5	5.0	6.5
In HS	12.8	8.8	8.7	12.4
HS Cert	4.7	3.5	3.7	3.5
HSDG	67.2	73.2	66.6	64.8
Some College	5.3	5.7	7.2	6.3
BA/BS+	4.1	5.4	8.8	6.5
N	10,631	8,743	992	508

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number or cases with all variables defined.

TABLE 38

AFQT CATEGORY DISTRIBUTION OF USAR MEMBERSHIP BY RACE AND SEX (IN PERCENT)

NON-PRIOR SERVICE MALES

AFQT CATEGORY	WHITE	BLACK	HISPANIC	OTHER
I	8.7	3.4	3.0	4.1
II	39.0	13.3	15.2	25.3
III-A	20.7	16.8	22.2	20.5
III-B	23.4	38.9	39.3	28.7
IV	8.1	27.5	20.3	21.4
N	12,330	4,029	915	687

NON-PRIOR SERVICE FEMALES

AFQT CATEGORY	WHITE	BLACK	HISPANIC	OTHER
I	8.8	2.6	2.2	5.2
II	41.2	14.5	14.4	27.3
III-A	22.0	20.9	19.4	24.2
III-B	26.8	57.5	59.5	40.6
IV	1.2	4.5	4.5	2.7
N	10,052	8,349	952	483

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 39

MARITAL STATUS DISTRIBUTION OF USAR MEMBERSHIP BY RACE AND SEX (IN PERCENT)

NON-PRIOR SERVICE MALES

MARITAL STATUS	WHITE	BLACK	HISPANIC	OTHER
Single, no depend	81.9	80.4	72.6	84.8
Single, w/depend	1.7	5.1	3.4	1.4
Married, no depend	0.8	0.7	0.6	0.7
Married, w/depend	15.6	13.8	23.4	13.1
N	13,167	4,489	1,030	730

NON-PRIOR SERVICE FEMALES

MARITAL STATUS	WHITE	BLACK	HISPANIC	OTHER
Single, no depend	75.8	72.4	74.1	76.0
Single, w/depend	4.8	11.3	7.8	5.5
Married, no depend	3.6	2.2	2.3	2.4
Married, w/depend	15.8	14.1	15.8	16.1
N	10,540	8,702	983	508

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 40

CENSUS REGION DISTRIBUTION OF USAR MEMBERSHIP BY RACE AND SEX (IN PERCENT)

NON-PRIOR SERVICE MALES

CENSUS REGION	WHITE	BLACK	HISPANIC	OTHER
New England	7.3	2.0	2.5	3.3
Middle Atlantic	15.7	17.0	14.5	14.3
South Atlantic	10.9	24.4	4.4	4.7
East North Central	21.6	17.7	6.0	8.0
East South Central	6.0	13.3	0.6	0.8
West North Central	14.2	4.4	2.1	4.1
West South Central	9.4	14.9	20.8	6.0
Mountain	5.9	1.2	6.1	4.7
Pacific	9.0	5.0	12.7	46.1
Territories	0.1	0.0	30.2	7.9
N	13,325	4,536	1,046	747

NON-PRIOR SERVICE FEMALES

CENSUS REGION	WHITE	BLACK	HISPANIC	OTHER
New England	6.8	1.9	2.3	3.3
Middle Atlantic	16.6	19.7	16.5	18.0
South Atlantic	11.5	26.1	3.1	7.7
East North Central	19.7	16.8	4.7	8.8
East South Central	5.0	13.3	0.2	1.7
West North Central	15.2	4.7	1.2	8.8
West South Central	9.2	11.8	25.9	7.7
Mountain	5.8	0.8	4.5	5.4
Pacific	10.0	4.8	12.8	34.9
Territories	0.1	0.0	28.9	3.6
N	10,728	8,809	1,001	521

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number or cases with all variables defined.

TABLE 41

EDUCATION LEVEL DISTRIBUTION OF USAR MEMBERSHIP BY ENTRY AGE AND SEX (IN PERCENT)

NON-PRIOR SERVICE MALES

EDUCATION	17-20	21-24	25-29	30-34
Non-HSG	14.3	5.4	4.2	4.2
In HS	15.7	0.4	0.3	0.3
HS Cert	6.2	8.7	9.0	5.4
HSDG	61.4	71.5	62.9	53.7
Some College	1.8	7.8	8.7	7.5
BA/BS+	0.6	6.2	14.9	29.0
N	13,445	3,132	1,013	335

NON-PRIOR SERVICE FEMALES

EDUCATION	17-20	21-24	25-29	30-34
Non-HSG	6.6	0.6	0.8	0.3
In HS	16.2	0.5	0.6	0.2
HS Cert	3.3	5.0	6.4	6.3
HSDG	70.1	74.9	61.6	59.0
Some College	3.0	10.1	11.4	14.2
BA/BS+	0.8	8.9	19.2	19.9
N	13,107	4,048	1,758	873

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 42

AFQT CATEGORY DISTRIBUTION OF USAR MEMBERSHIP BY ENTRY AGE AND SEX (IN PERCENT)

NON-PRIOR SERVICE MALES

AFQT CATEGORY	17-20	21-24	25-29	30-34
I	5.9	10.6	9.7	13.7
II	30.2	33.0	35.3	37.8
III-A	21.0	15.8	14.7	20.1
III-B	29.1	24.7	28.1	19.4
IV	13.8	15.8	12.2	9.0
N	12,868	2,689	904	299

NON-PRIOR SERVICE FEMALES

AFQT CATEGORY	17-20	21-24	25-29	30-34
I	4.8	7.6	7.1	7.2
II	26.5	29.2	32.2	38.2
III-A	21.8	19.5	20.5	24.2
III-B	44.1	40.6	37.2	28.2
IV	2.8	3.1	2.9	2.1
N	12,742	3,732	1,647	843

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 43

MARITAL STATUS DISTRIBUTION OF USAR MEMBERSHIP BY ENTRY AGE AND SEX (IN PERCENT)

NON-PRIOR SERVICE MALES

MARITAL STATUS	17-20	21-24	25-29	30-34
Single, no depend	88.6	68.3	43.8	28.4
Single, w/depend	1.8	3.8	6.5	9.9
Married, no depend	0.6	1.2	0.9	2.5
Married, w/depend	9.0	26.7	48.8	59.2
N	13,404	3,108	437	324

NON-PRIOR SERVICE FEMALES

MARITAL STATUS	17-20	21-24	25-29	30-34
Single, no depend	83.4	65.0	48.3	37.1
Single, w/depend	5.3	9.8	15.4	19.7
Married, no depend	2.5	4.0	3.3	2.7
Married, w/depend	8.8	21.2	33.0	40.5
N	13,061	3,986	1,707	820

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 44

CENSUS REGION DISTRIBUTION OF USAR MEMBERSHIP BY ENTRY AGE AND SEX (IN PERCENT)

NON-PRIOR SERVICE MALES

CENSUS REGION	17-20	21-24	25-29	30-34
New England	6.1	4.7	4.1	3.5
Middle Atlantic	16.4	14.7	17.8	15.7
South Atlantic	13.0	14.1	14.2	14.0
East North Central	19.5	20.5	19.0	17.4
East South Central	7.4	7.0	7.1	4.1
West North Central	11.2	10.2	8.2	9.0
West South Central	11.0	11.8	12.2	9.9
Mountain	4.5	5.0	5.2	4.9
Pacific	9.5	8.8	8.8	17.2
Territories	1.5	3.2	3.4	4.4
N	13,502	3,167	1,035	344

NON-PRIOR SERVICE FEMALES

CENSUS REGION	17-20	21-24	25-29	30-34
New England	4.7	4.0	3.7	3.6
Middle Atlantic	17.9	18.7	18.5	18.6
South Atlantic	16.7	17.1	18.6	20.0
East North Central	18.2	17.2	15.7	17.6
East South Central	8.5	8.2	7.5	6.3
West North Central	10.4	8.5	9.6	8.2
West South Central	10.7	12.3	11.2	9.0
Mountain	3.5	3.6	4.0	4.4
Pacific	8.3	8.4	8.6	10.0
Territories	1.2	2.1	2.5	2.3
N	13.161	4,089	1,766	877

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

APPENDIX E
USAR PRIOR SERVICE ENLISTED MEMBERSHIP
MARCH 1987

MALE SAMPLE SIZE: 18,167

FEMALE POPULATION: 8,119

TABLE 45

ENTRY AGE DISTRIBUTION OF USAR MEMBERSHIP BY RACE AND SEX (IN PERCENT)

PRIOR SERVICE MALES

AGE	WHITE	BLACK	HISPANIC	OTHER
17-20 yrs.	38.1	32.3	29.9	33.1
21-24 yrs.	36.9	39.4	38.0	37.2
25-29 yrs.	15.5	19.5	21.0	19.1
30-34 yrs.	9.5	8.8	11.2	10.6
N	8,761	4,155	977	320

PRIOR SERVICE FEMALES

AGE	WHITE	BLACK	HISPANIC	OTHER
17-20 yrs.	37.6	35.9	35.1	42.2
21-24 yrs.	27.0	30.7	32.0	24.2
25-29 yrs.	21.9	22.4	18.7	18.8
30-34 yrs.	13.4	11.0	14.2	14.8
N	3,236	3,173	316	128

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 46

EDUCATION LEVEL DISTRIBUTION OF USAR MEMBERSHIP BY RACE AND SEX (IN PERCENT)

PRIOR SERVICE MALES

EDUCATION	WHITE	BLACK	HISPANIC	OTHER
Non-HSG	4.7	7.4	7.0	5.5
In HS	0.1	0.0	0.0	0.0
HS Cert	9.3	7.4	7.7	8.8
HSDG	53.6	61.8	54.0	59.0
Some College	16.8	14.8	19.3	16.6
BA/BS+	15.6	8.6	12.1	10.1
N	11,203	4,965	1,223	398

PRIOR SERVICE FEMALES

EDUCATION	WHITE	BLACK	HISPANIC	OTHER
Non-HSG	1.7	2.2	3.1	3.8
In HS	0.1	0.1	0.3	0.0
HS Cert	7.4	6.3	10.9	10.1
HSDG	61.1	63.8	49.7	51.3
Some College	18.4	17.9	23.1	20.9
BA/BS+	11.3	9.7	12.9	13.9
N	3,794	3,564	350	158

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 47

AFQT CATEGORY DISTRIBUTION OF USAR MEMBERSHIP BY RACE AND SEX (IN PERCENT)

PRIOR SERVICE MALES

AFQT CATEGORY	WHITE	BLACK	HISPANIC	OTHER
I	15.4	8.6	5.7	9.6
II	39.1	13.3	14.1	25.1
III-A	22.8	17.8	18.6	22.7
III-B	17.1	37.2	40.2	27.4
IV	5.7	23.1	21.4	15.2
N	10,152	4,385	1,076	343

PRIOR SERVICE FEMALES

AFQT CATEGORY	WHITE	BLACK	HISPANIC	OTHER
I	22.8	11.1	9.6	17.2
II	43.8	28.2	24.5	25.0
III-A	21.1	31.4	31.8	29.7
III-B	9.7	20.6	21.7	21.9
IV	2.6	8.6	12.4	6.3
N	3,305	3,144	314	128

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 48

MARITAL STATUS DISTRIBUTION OF USAR MEMBERSHIP BY RACE AND SEX (IN PERCENT)

PRIOR SERVICE MALES

MARITAL STATUS	WHITE	BLACK	HISPANIC	OTHER
Single, no depend	17.5	24.9	16.5	28.1
Single, w/depend	6.3	11.8	6.6	4.5
Married, no depend	1.4	1.7	1.4	2.0
Married, w/depend	74.8	61.6	75.5	65.4
N	11,132	4,982	1,228	402

PRIOR SERVICE FEMALES

MARITAL STATUS	WHITE	BLACK	HISPANIC	OTHER
Single, no depend	40.4	31.2	34.6	37.0
Single, w/depend	16.3	29.2	23.7	18.6
Married, no depend	5.5	4.2	2.8	6.2
Married, w/depend	37.8	35.4	38.9	38.2
N	3,829	3,594	355	162

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 49

CENSUS REGION DISTRIBUTION OF USAR MEMBERSHIP BY RACE AND SEX (IN PERCENT)

PRIOR SERVICE MALES

CENSUS REGION	WHITE	BLACK	HISPANIC	OTHER
New England	6.6	1.4	0.9	2.3
Middle Atlantic	18.7	13.6	9.0	7.6
South Atlantic	15.6	35.5	3.9	6.5
East North Central	17.2	13.6	3.5	7.4
East South Central	7.5	13.2	0.9	1.4
West North Central	10.9	2.9	1.0	4.1
West South Central	9.3	12.6	18.4	8.5
Mountain	4.6	1.1	6.7	4.1
Pacific	9.3	6.1	11.9	47.9
Territories	0.2	0.1	43.7	10.1
N	11,348	5,047	1,242	434

PRIOR SERVICE FEMALES

CENSUS REGION	WHITE	BLACK	HISPANIC	OTHER
New England	6.7	2.3	1.4	4.0
Middle Atlantic	16.6	16.6	17.1	13.7
South Atlantic	14.8	33.3	4.8	14.9
East North Central	15.9	14.5	3.9	9.1
East South Central	4.2	12.0	1.1	2.9
West North Central	14.0	5.0	1.7	5.1
West South Central	8.8	10.1	21.8	15.4
Mountain	5.7	0.6	9.5	11.4
Pacific	13.1	5.7	12.0	20.6
Territories	0.2	0.0	26.6	2.9
N	3,895	3,627	357	175

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 50

EDUCATION LEVEL DISTRIBUTION OF USAR MEMBERSHIP BY ENTRY AGE AND SEX (IN PERCENT)

PRIOR SERVICE MALES

EDUCATION	17-20	21-24	25-29	30-34
Non-HSG	9.1	4.1	4.4	2.7
In HS	0.2	0.0	0.0	0.0
HS Cert	10.2	7.4	7.4	8.3
HSDG	60.0	53.4	54.2	49.2
Some College	13.1	18.9	18.5	21.2
BA BS+	7.5	16.1	15.5	18.5
N	5,042	5,314	2,408	1,332

PRIOR SERVICE FEMALES

EDUCATION	17-20	21-24	25-29	30-34
Non-HSG	4.3	1.9	0.4	0.1
In HS	0.2	0.0	0.1	0.0
HS Cert	9.3	7.3	5.1	6.1
HSDG	69.1	61.2	53.6	47.7
Some College	12.1	20.1	23.7	26.5
BA/BS+	4.9	9.6	17.1	19.6
N	2,485	1,958	1,482	838

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 51

AFQT CATEGORY DISTRIBUTION OF USAR MEMBERSHIP BY ENTRY AGE AND SEX (IN PERCENT)

PRIOR SERVICE MALES

AFQT CATEGORY	17-20	21-24	25-29	30-34
I	15.8	12.1	11.6	10.5
II	25.3	29.5	29.7	37.1
III-A	20.4	20.7	22.0	22.7
III-B	26.4	24.7	24.6	21.0
IV	12.1	12.9	12.0	8.6
N	4,612	4,850	2,111	1,193

PRIOR SERVICE FEMALES

AFQT CATEGORY	17-20	21-24	25-29	30-34
I	17.8	16.6	17.0	17.8
II	28.0	34.4	41.1	43.8
III-A	24.5	26.6	28.3	28.6
III-B	19.5	16.4	11.2	8.1
IV	10.1	6.1	2.4	1.7
N	2,207	1,702	1,319	774

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 52

MARITAL STATUS DISTRIBUTION OF USAR MEMBERSHIP BY ENTRY AGE AND SEX (IN PERCENT)

PRIOR SERVICE MALES

MARITAL STATUS	17-20	21-24	25-29	30-34
Single, no depend	26.8	16.6	15.6	9.2
Single, w/depend	7.5	8.7	8.3	9.0
Married, no depend	1.7	1.2	1.4	1.2
Married, w/depend	64.0	73.5	74.7	80.6
N	5,080	5,342	2,422	1,337

PRIOR SERVICE FEMALES

MARITAL STATUS	17-20	21-24	15-29	30-34
Single, no depend	35.8	34.5	32.6	34.5
Single, w/depend	22.2	23.9	23.7	26.5
Married, no depend	5.6	5.1	3.4	4.1
Married, w/depend	36.4	36.5	40.3	34.9
N	2,514	1,975	1,498	846

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

TABLE 53

CENSUS REGION DISTRIBUTION OF USAR MEMBERSHIP BY ENTRY AGE AND SEX (IN PERCENT)

PRIOR SERVICE MALES

CENSUS REGION	17-20	21-24	25-29	30-34
New England	5.2	4.3	4.5	4.4
Middle Atlantic	16.7	16.6	14.3	15.6
South Atlantic	22.0	21.7	20.0	17.6
East North Central	14.9	15.1	15.2	16.5
East South Central	9.8	9.6	9.2	7.5
West North Central	7.0	7.0	7.3	9.2
West South Central	9.6	10.2	11.5	10.3
Mountain	3.9	3.3	3.5	3.0
Pacific	8.0	9.0	10.2	11.0
Territories	2.9	3.3	4.2	4.9
N	5,088	5,362	2,429	1,343

PRIOR SERVICE FEMALES

CENSUS REGION	17-20	21-24	25-29	30-34
New England	8.8	6.4	4.8	4.2
Middle Atlantic	18.2	21.0	22.0	18.3
South Atlantic	18.0	21.2	18.2	15.3
East North Central	14.2	13.9	16.3	15.6
East South Central	8.5	7.1	7.0	6.5
West North Central	7.3	7.1	5.8	10.3
West South Central	12.3	10.4	10.9	9.9
Mountain	3.8	3.1	4.2	6.1
Pacific	8.0	8.8	8.0	12.6
Territories	0.8	1.1	2.9	1.1
N	927	453	313	262

Note 1: Column percentages may not equal 100.0 percent due to rounding.
Note 2: N denotes the number of cases with all variables defined.

APPENDIX F
ECONOMIC INFLUENCES ON 1986 NEW RECRUIT SURVEY

ENTRY AGE
RACIAL-ETHNIC GROUP
QUALITY GROUP

TABLE 54

ECONOMIC INFLUENCES ON 1986 RNRS RESPONDENTS BY AGE (IN PERCENT)

	VARIABLE	16-20	21-24	25-29	30-35
	Money for College	65.7	64.9	49.4	59.3
*	Earning Money	58.3	56.8	52.4	52.0
*	Skill Training	56.3	50.4	57.3	65.4
*	Money for Vocational Training	33.5	31.2	35.8	38.5
*	Retirement Benefits	27.1	29.3	37.0	53.8
*	Fringe Benefits	27.2	31.4	32.5	50.0
*	Working w High-tech Equipment	22.2	24.3	32.9	40.7
	Unemployment	10.1	11.5	11.0	11.5
	N	2,336	252	85	29

Note: **Significance level = .01* ***Significance level = .05*

TABLE 55
ECONOMIC INFLUENCES ON 1986 RNRS RESPONDENTS
RACIAL-ETHNIC GROUP (IN PERCENT)

	VARIABLE	White	Black	Hispanic	Other
	Money for College	64.0	68.1	64.0	68.6
*	Earning Money	56.5	63.9	55.9	46.0
*	Skill Training	52.7	64.3	60.0	60.2
*	Money for Vocational Training	31.0	37.1	46.8	41.2
	Retirement Benefits	27.3	30.3	30.0	18.1
*	Fringe Benefits	25.3	35.0	36.1	25.9
*	Working w/ High-tech Equipment	20.3	31.2	21.1	23.3
	Unemployment	9.8	11.1	13.6	10.7
	N	1,880	609	116	89

Note: **Significance = .01 level   **Significance = .05 level*

TABLE 56

ECONOMIC INFLUENCES ON 1986 RNRS RESPONDENTS BY QUALITY GROUP (IN PERCENT)

	VARIABLE	HIGH	INDETER	LOW
*	Money for College	76.6	69.1	52.9
	Earning Money	60.0	58.3	56.1
*	Skill Training	47.5	53.7	64.3
	Money for Vocational Training	26.7	33.2	38.3
	Retirement Benefits	27.8	27.5	27.6
*	Fringe Benefits	26.4	25.5	31.7
	Working with High-Tech Equipment	18.2	20.9	28.1
*	Unemployment	5.8	8.7	14.2
	N	615	1,106	907

Note: **Significance level = .01* ***Significance level = .05*

APPENDIX G
ADVERTISING INFLUENCES ON 1986 NEW RECRUIT SURVEY

SURVEY QUESTIONS/RESPONSES
ENTRY AGE
RACIAL-ETHNIC GROUP

1986 NEW RECRUIT SURVEY QUESTIONS
FOR ADVERTISING INFLUENCES

How important were the following in your decision to talk to an Army recruiter?

- Recruiter contacted me and sold me on the idea
- Information in an Army ad on TV
- A friend of mine enlisted
- Information from an Army ad in a magazine
- Information posted at school
- Information from a job fair
- Information in an Army ad on the radio
- Information I received in the mail after I sent a card or called a toll-free number in response to an Army ad (Information from REACT)
- Information I received in the mail from the Army (which I had not requested)
- Information from a recrutier aide. A recruiter aide is an Army soldier who returns to his hometown and school after training to help the Army recruiter contact people who might want to enlist.
- A recruiter from another service suggested it
- When I applied for a civilian job, they said I needed more experience or training
- Information posted at a state employment office
- A counselor at the state employment office suggested it
- A policeman judge probation officer suggested it

1986 NEW RECRUIT SURVEY RESPONSES
FOR ADVERTISING INFLUENCES

1 Does not apply; event did not occur
2 Event occurred but not all important
3 Somewhat important
4 Very important
5 I would not have talked to an Army recruiter except for this reason

TABLE 57

ADVERTISING INFLUENCES ON 1986 RNRS RESPONDENTS BY AGE (IN PERCENT)

	VARIABLE	16-20	21-24	25-29	30-35
*	Recruiter Contact	42.3	19.6	10.0	11.1
	Army Ad, TV	33.5	29.2	38.3	38.5
**	Enlisted Friend	29.9	25.6	22.0	7.7
	Army Ad, Magazine	29.1	27.1	25.9	40.7
*	Information at School	30.6	18.5	13.8	11.1
**	Job Fair	24.5	18.4	13.4	25.9
	Army Ad, Radio	24.0	23.0	27.2	33.3
*	Information from REACT	29.4	12.1	7.3	7.4
*	Non-Solicited Mail	25.3	9.3	5.0	0.0
	Recruiter Aide	15.7	14.2	12.0	0.0
*	Civilian Job Information	11.2	17.4	19.0	7.4
	Recruiter, Other Service	7.1	8.8	6.0	3.8
	State Employment Office	3.0	3.0	3.7	3.7
	State Employment Counselor	3.2	2.9	2.4	0.0
	Police/Judge/Probation Off.	3.0	2.9	2.4	3.7
	N	2,336	252	85	29

*Note *Significance level = .01 **Significance level = .05*

TABLE 58

ADVERTISING INFLUENCES ON 1986 RNRS RESPONDENTS BY RACIAL-ETHNIC GROUP (IN PERCENT)

	VARIABLE	White	Black	Hispanic	Other
	Recruiter Contact	38.9	39.2	34.6	39.5
	Army Ad, TV	33.6	33.6	22.1	33.7
	Enlisted Friend	29.3	30.1	21.3	29.6
	Army Ad, Magazine	28.7	29.7	20.2	35.4
	Information at School	27.9	31.9	21.8	32.1
*	Job Fair	21.5	27.2	33.3	33.7
	Army Ad, Radio	24.4	23.2	19.0	27.4
	Information from REACT	28.1	24.1	19.2	25.3
	Non-Solicited Mail	22.9	24.6	14.4	18.5
*	Recruiter Aide	12.8	22.4	11.3	21.0
*	Civilian Job Information	10.6	14.5	19.0	18.3
**	Recruiter, Other Service	6.2	9.0	11.3	10.8
*	State Employment Office	3.1	5.7	5.8	7.4
*	State Employment Counselor	2.3	5.0	6.8	4.9
	Police Judge Probation Off.	2.4	4.1	4.9	4.9
	N	1,880	609	116	89

*Note *Significance level = .01 **Significance level = .05*

APPENDIX H
INTRINSIC INFLUENCES ON 1986 NEW RECRUIT SURVEY

ENTRY AGE
RACIAL-ETHNIC GROUP
QUALITY GROUP

TABLE 59
INTRINSIC INFLUENCES ON FY86 USAR ACCESSIONS BY AGE (IN PERCENT)

VARIABLE	16-20	21-24	25-29	30-35
PATRIOTISM				
To Serve Country	53.9	50.6	61.0	60.7
To be a Soldier	32.4	28.0	21.0	30.8
To Experience Military Life	22.7	22.5	20.5	19.2
Family Tradition	11.4	10.3	13.8	11.1
SELF-DEVELOPMENT				
To Better Self	67.5	67.1	72.9	70.4
** To be Responsible Person	53.8	50.6	42.7	30.8
Physical Training	52.8	54.5	54.9	53.8
To be Self-Reliant	48.7	51.0	40.2	38.5
To Prove I Can Make It	41.5	37.5	28.6	42.3
Leadership Training	37.0	42.9	45.6	42.3
To Decide Life Plans	19.4	14.2	12.2	15.8
SOCIAL VALUES				
Men & Women Treated Equally	7.7	9.0	15.5	25.9
* Men & Women Should Experience Military Service	25.1	29.6	31.3	42.3
N	2,336	252	85	29

*Note: *Significance level = .01 **Significance level = .05*

TABLE 60

INTRINSIC INFLUENCES ON FY86 USAR ACCESSIONS BY RACIAL-ETHNIC GROUP (IN PERCENT)

	VARIABLE	White	Black	Hispanic	Other
	PATRIOTISM				
*	To Serve Country	57.4	42.8	56.4	51.2
	To be a Soldier	31.0	31.4	36.4	37.6
*	To Experience Military Life	19.2	31.1	31.5	24.4
	Family Tradition	11.8	11.3	8.2	6.0
	SELF-DEVELOPMENT				
*	To Better Self	65.7	72.8	71.4	67.1
*	To be Responsible Person	49.4	62.0	61.1	53.5
**	Physical Training	51.6	56.3	50.5	64.0
*	To be Self-Reliant	45.3	59.5	49.1	43.4
*	To Prove I Can Make It	38.7	45.8	46.4	41.2
*	Leadership Training	35.6	45.1	35.8	38.1
*	To Decide Life Plans	16.8	22.2	21.8	28.2
	SOCIAL VALUES				
*	Men & Women Treated Equally	6.8	12.8	7.4	10.6
*	Men & Women Should Experience Military Service	21.0	40.5	27.5	25.0
	N	1,880	609	116	89

Note: **Significance level = .01 **Significance level = .05*

TABLE 61

INTRINSIC INFLUENCES ON 1986 RNRS RESPONDENTS BY QUALITY (IN PERCENT)

	VARIABLE	HIGH	INDETER	LOW
	PATRIOTISM			
*	To Serve Country	46.6	56.3	55.8
*	To be a Soldier	20.7	32.8	36.7
*	To Experience Military Life	18.0	20.3	28.1
	Family Tradition	10.3	11.7	11.1
	SELF-DEVELOPMENT			
*	To Better Self	61.8	66.1	72.9
	To be Responsible Person	43.9	50.6	61.6
**	Physical Training	48.9	52.3	56.1
*	To be Self-Reliant	42.8	46.3	54.9
*	To Prove I Can Make It	34.2	37.5	49.0
	Leadership Training	38.3	35.5	40.0
*	To Decide Life Plans	13.1	17.9	23.0
	SOCIAL VALUES			
**	Men & Women Treated Equally	7.6	5.9	11.9
*	Men & Women Should Experience Military Service	23.8	20.7	34.2
	N	615	1,106	907

Note: **Significance level = .01* ***Significance level = .05*

APPENDIX I

INFORMATION FROM ARMY RECRUITERS AND GUIDANCE COUNSELORS

GENDER
RACIAL-ETHNIC GROUP
ENTRY AGE
QUALITY GROUP

TABLE 62

SATISFACTION OF 1986 RNRS RESPONDENTS WITH JOB INFORMATION FROM ARMY RECRUITERS AND COUNSELORS (IN PERCENT)

VARIABLE SEX	MALE	FEMALE
Information from Recruiter	58.7	59.5
Information from Counselor	59.2	61.9
N	2,252	452

VARIABLE RACE	White	Black	Hispanic	Other
Information from Recruiter	57.9	63.2	55.4	54.5
* Infromation from Counselor	57.7	66.2	59.1	61.4
N	1,880	609	116	89

VARIABLE AGE (Yrs)	16-20	21-24	25-29	30-35
Information from Recruiter	58.4	60.2	64.7	64.3
Information from Counselor	59.8	57.1	63.5	57.1
N	2,336	252	85	29

VARIABLE QUALITY	HIGH	INDETER	LOW
Information from Recruiter	57.3	57.7	62.2
* Information from Counselor	54.1	58.9	64.5
N	615	1,106	907

Note: *Significance = .01 level   **Significance = .05 level

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